DRAFT DATE: 1 MAR 2004

NAD

SERVICE MANUAL

T 773

A/V Receiver

T 773

A/V Receiver

SAFETY INFORMATION

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THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, (2) THIS DEVICE MUST ACCEPT INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

NAD ELECTRONICS INTERNATIONAL
633 GRANITE COURT, PICKERING, ON, CANADA L1W 3K1
MODEL T 773 A/V SURROUND SOUND RECEIVER
POWER RATING 120V 60Hz 8.5A ~
CUSTOM MANUFACTURED TO NAD SPECIFICATIONS IN THE PEOPLE'S REPUBLIC OF CHINA

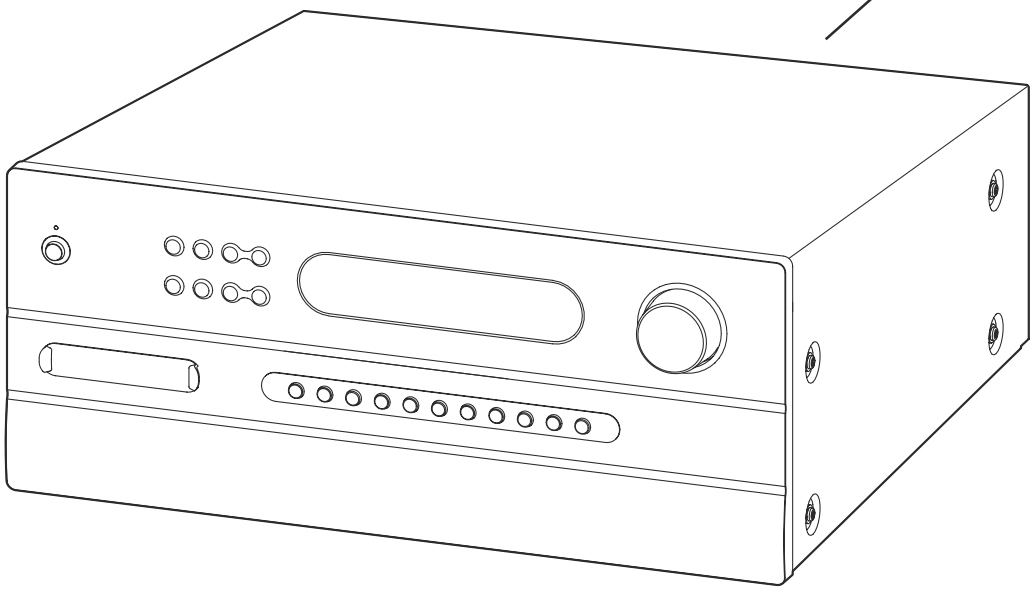
AH VERSION

NAD ELECTRONICS INTERNATIONAL
MODEL T 773 A/V SURROUND SOUND RECEIVER
POWER RATING 230V 50Hz 4.5A ~
CUSTOM MANUFACTURED TO NAD SPECIFICATIONS IN THE PEOPLE'S REPUBLIC OF CHINA

C VERSION

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING: SHOCK HAZARD - DO NOT OPEN
AVIS: RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR



SERVICE SAFETY PRECAUTIONS

1. Replacing the fuses

CAUTION:
FOR CONTINUED PROTECTION AGAINST THE RISK OF FIRE REPLACE ONLY WITH SAME TYPE OF FUSE.

Reference Designator	Part Number	Description
F751*AH ⚠	33-0321111-00-88	FUSE 20A/250VAC SLOW BLOW 6X32mm 6S UL/CSA
F751*C ⚠	33-0161006-00-88	FUSE 10A/250VAC TIME-LAG 5X20mm 5D VDE/UL/CSA
F752*AH ⚠	33-0111006-00-88	FUSE 1.6A 250V TIME LAG 5x20mm 5T UL/CSA/VDE/SEMKO
F752*C ⚠	33-0151006-00-88	FUSE 800mA 250V TIME LAG 5x20mm 5T UL/CSA/VDE/SEMKO

NOTE:
<*AH > : USA, CANADIAN MODEL ONLY.
<*C > : EUROPEAN MODEL ONLY.

2. Safety check out

(Only U.S.A. model)

Before returning the product to the customer, make leakage current or resistance measurements to determine that exposed parts are acceptably insulated from supply circuit.

Parts marked with the symbol ⚠ are critical with regard to the risk of fire and electric shock.
Replace only with parts recommended by the manufacturer.

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SPECIFICATIONS

POWER AMPLIFIER SECTION

Rated distortion	(Rated power level into 8 ohms, THD 20 Hz-20 kHz FL/C/FR)	≤ **0.1 %**
	(Rated power level into 8 ohms, THD 20 Hz-20 kHz SL/SR/BS)	≤ **0.1 %**
Input Sensitivity	(ref. 8 ohms, 1 kHz)	**166 ± 20 mV**
S/N Ratio	(A-wtd, 1kHz, 1 W, 8 ohm, SL/SR/BL)	**≥ - 72 dB**
Frequency Response	(20 Hz - 20 kHz)	**0 ± 1.0 dB**
Channel Balance	(1 dB to -40 dB, 1 kHz)	≤ **2 dB**
	(-41 dB to -50 dB, 1 kHz)	≤ **3 dB**
Audio muting at 1 kHz		**≥ 55 dB**
Subwoofer out, 500 mV in	(THD at 2 V O/P, 100 Hz)	≤ **0.5 %**
Crosstalk	(500 mV input, 10 W, 1 kHz)	**≥ -57 dB**

Controls

Bass	(at 500 mV in, 1 W out, 100 Hz)	**± 10 dB ± 2 dB**
Treble	(at 500 mV in, 1 W out, 10 kHz)	**± 10 dB ± 2 dB**

DOLBY DIGITAL SECTION

Channel Difference(FL ref. Track 30)			**± 1.2 dB**
Frequency Resporse at Dolby config.2		SL Track 46 200 - 20 kHz	**± 0.8 dB**
		SR Track 47 200 - 20 kHz	**± 0.8 dB**
		C Track 44 200 - 20 kHz	**± 0.8 dB**
Harmonic Distortion	(1 W, Audio LPF, Dolby Congfig 1)	FL Track 65 997 Hz	≤ **0.08 %**
		FR Track 67 997 Hz	≤ **0.08 %**
		SL Track 68 997 Hz	≤ **0.08 %**
		SR Track 69 997 Hz	≤ **0.08 %**
		C Track 66 997 Hz	≤ **0.08 %**
S/N Ratio	(TRACK 30 for O/P 1 W, FAUSE)	CCIR / ARM	**≥ 65 dB**
		Audio LPF	**≥ 70 dB**
		A-WTD	**≥ 70 dB**
Channel Separation	(1 W, A-WTD FILTER)	Track 65 997 Hz	**≥ 60 dB**

DOLBY PRO LOGIC II SECTION

Frequency Resporse

I/P mode : L, R	: 1 V in, 1 W, Ch L/R	40 Hz	**0 ± 2.0 dB**
		20 kHz	**0 ± 2.0 dB**
I/P mode : L=R	: 1 V in, 1 W, Ch /L/R	40 Hz	**0 ± 2.0 dB**
	Ch C	20 kHz	**0 ± 2.0 dB**
I/P mode : L=-R	: 1 V in, 1 W, Ch SL/SR	40 Hz	**0 ± 2.0 dB**
		20 kHz	**0 ± 2.0 dB**

S/N Ratio (200 mV in, 1 W, A-WTD w/ 1 k termination)		
I/P mode : L, R	: 1 kHz, Ch L/R	**≥ 65 dB**
I/P mode : L=R	: 1 kHz, Ch C	**≥ 65 dB**
I/P mode : L=-R	: 1 kHz, Ch SL/SR	**≥ 65 dB**
THD (2.2 V in, 1 W, w/ 80 kHz LPF, 1 kHz)		≤ **0.2 %**

DTS SECTION

Output Level (Vol 0 dB)	: FL/FR/C/SL/SR	Track 6 1 kHz	**0.3 ± 1.3 W**
Channel Difference (FL ref)	: FL/FR/C/SL/SR	Track 6 1 kHz	**± 1.0 dB**
Harmonic Distortion (Audio Filter)	: FL/FR/C/SL/SR	Track 10-14 1 kHz	**≤ 0.08 %**
Frequency Response (20 Hz to 20 kHz)		Track 26-30	**+2/-1.5 dB**
Subwoofer Output Level	1 kHz ref at pre-out (FL)	Play Track 10, charge to 15	**12.5 ± 1.5 dB**

AM TUNER SECTION

Input level is expressed as the reading in open circuit of 75-ohm source impedance signal generator

Usable sensitivity	(999/1000 kHz)	**≤ 30 dBuV**
S/N Ratio	(5 mV in)	**≥ 38 dB**
THD	(5 mV in)	**≤ 3 %**
IF Rejection	(450 kHz)	**≥ 36 dB**
Image Rejection	(F+2xIF)	**≥ 28 dB**
Selectivity		**≥ 17 dB**
Output		**170 -20/+30 mV**
Loop sensitivity	(20 dB S/N)	
	999/1000 kHz	**≤ 66 dB**
	603/600 kHz	**≤ 66 dB**
	1404/1400 kHz	**≤ 66 dB**
Frequency Response	(100 - 2.3 kHz, 5 mV)	**± 6 dB**

FM TUNER SECTION

Input level is expressed as the reading in open circuit of 75-ohm source impedance signal generator

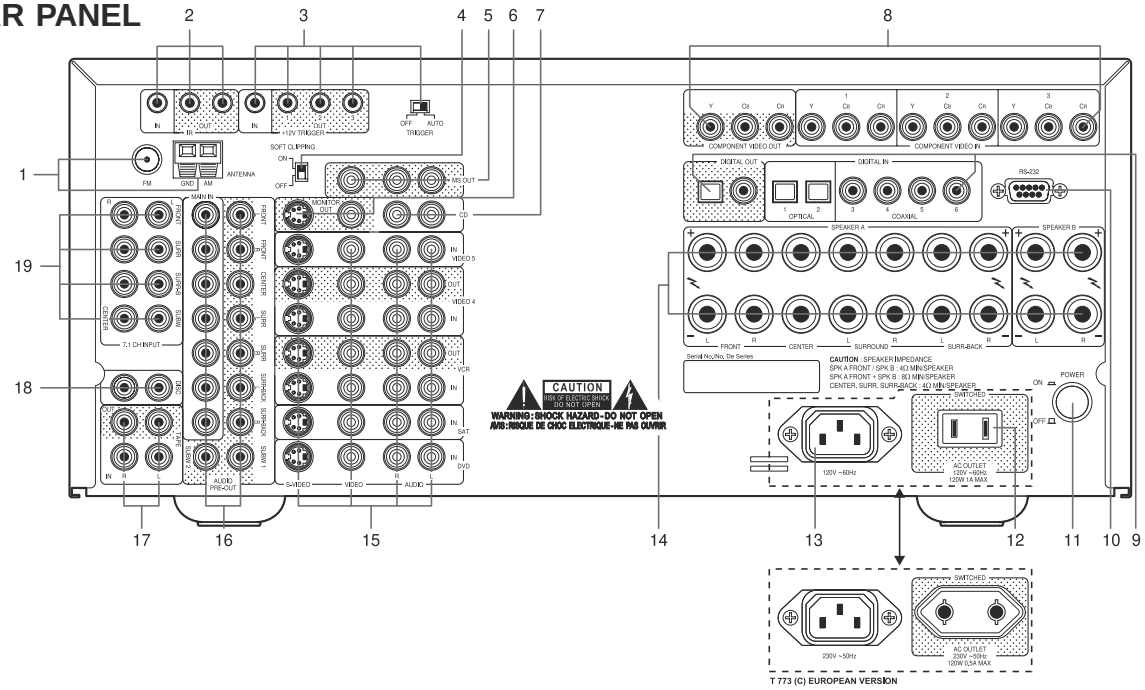
			*C	*AH
Usable sensitivity	(98 MHz)		**≤ 15 dBµV**	**≤ 15 dBuv**
S/N Ratio	(60 dB, IHF wtd)	Mono	**≥ 63 dB**	**≥ 63 dB**
		Stereo	**≥ 63 dB**	**≥ 63 dB**
Frequency Response	(20 Hz - 15 kHz, 60 dBµ)		**0 ± 1.5 dB**	**0 ± 1.5 dB**
Channel Separation	(60 dBµ)	100 Hz	**≥ 30 dB**	**≥ 30 dB**
		1 k	**≥ 38 dB**	**≥ 38 dB**
		10 kHz	**≥ 30 dB**	**≥ 30 dB**
Alternate Channel Selectivity (40 dBµ, ± 400 kHz)			**≥ 60 dB**	**≥ 45 dB**
Capture Ratio	(40 dBµ)		**≤ 3 dB**	**≤ 3 dB**
AM Suppression (60 dBµ, 100% Mod. FM, 30% Mod. AM)			**≥ 48 dB**	**≥ 48 dB**
Image Rejection	(119.4 MHz)		**–**	**≥ 65 dB**
I.F. Rejection	(10.7 MHz)		**≥ 78 dB**	**–**
Pilot Suppression	(98 MHz)		**≥ 60 dB**	**≥ 60 dB**
THD (60 dBµ, L=R 75 kHz for AH, 40 kHz Dev for C)		Mono	**≤ 0.25 %**	**≤ 0.25 %**
		Stereo	**≤ 0.35 %**	**≤ 0.35 %**
Auto-Search Sensitivity		On	**≥ 24 dBµ**	**≥ 24 dBµ**
		Off	**≤ 15 dBµ**	**≤ 15 dBµ**
RDS decode Sensitivity			**≤ 26 dBµ**	**–**

PHYSICAL SPECIFICATIONS

Dimensions (Width x Height x Depth)	**435 x 195 x 423 mm**
Net Weight	**24 Kg (52.80 lbs)**
Shipping Weight	**30.7 Kg (67.50 lbs)**

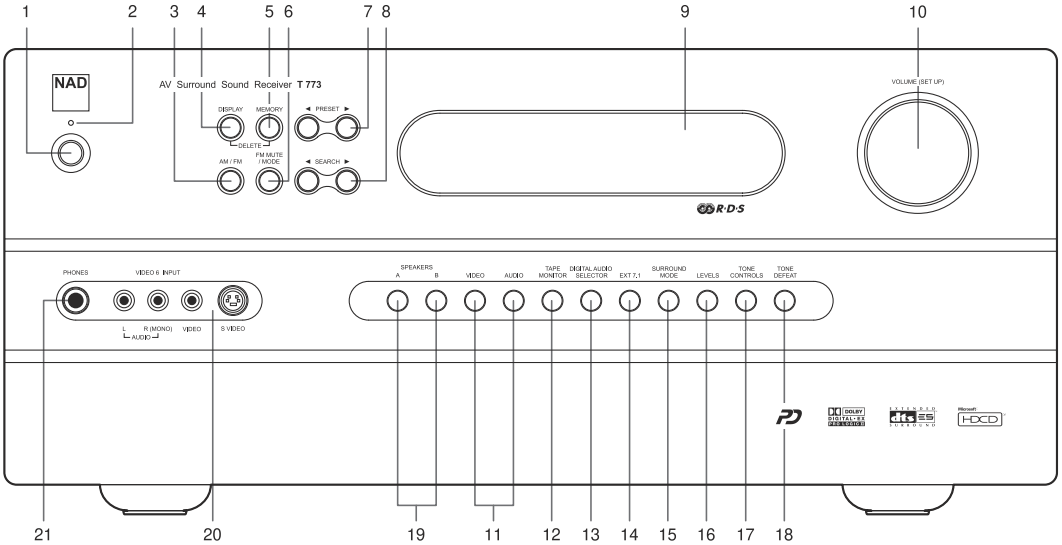
REAR PANEL / FRONT PANEL VIEW

REAR PANEL



1. FM & AM ANTENNA
2. IR INPUT & OUTPUT
3. +12V TRIGGER INPUT & OUTPUT
4. SOFT CLIPPING ON/OFF
5. MS OUT (MULTISOURCE OUT)
6. MONITOR OUT
7. CD INPUT
8. COMPONENT VIDEO IN & COMPONENT VIDEO OUT
9. DIGITAL AUDIO INPUT & DIGITAL AUDIO OUTPUT
10. RS-232
11. POWER SWITCH
12. SWITCHED AC OUTLETS
13. AC POWER INLET
14. SPEAKERS A & B
15. DVD, SAT, VCR, VIDEO 4 & VIDEO 5
16. MAIN IN / AUDIO PRE-OUTS / SUBWOOFER OUT
17. TAPE INPUT & OUTPUT
18. DISC INPUT
19. 7.1 CH. INPUTS

FRONT PANEL



1. STANDBY SWITCH
2. STANDBY LED
3. AM / FM
6. FM MUTE / MODE
4. DISPLAY
5. MEMORY
7. PRESET DOWN / UP
8. SEARCH DOWN / UP
9. VFL DISPLAY
10. VOLUME (SETUP)
11. VIDEO & AUDIO
12. TAPE MONITOR
13. DIGITAL AUDIO SELECTOR
14. EXT. 7.1
15. SURROUND MODE
16. LEVELS
17. TONE CONTROLS
18. TONE DEFEAT
19. SPEAKERS A & B
20. VIDEO 6 INPUT
21. PHONES

DISASSEMBLY INSTRUCTIONS

1. Remove machine screws M4.0 x 8.0 (**1** to **8**) from the side panels.
Remove tapping screw 3.0 x 8.0 (**9** to **12**) from the back panel.
Refer to **Figure No. 1**.

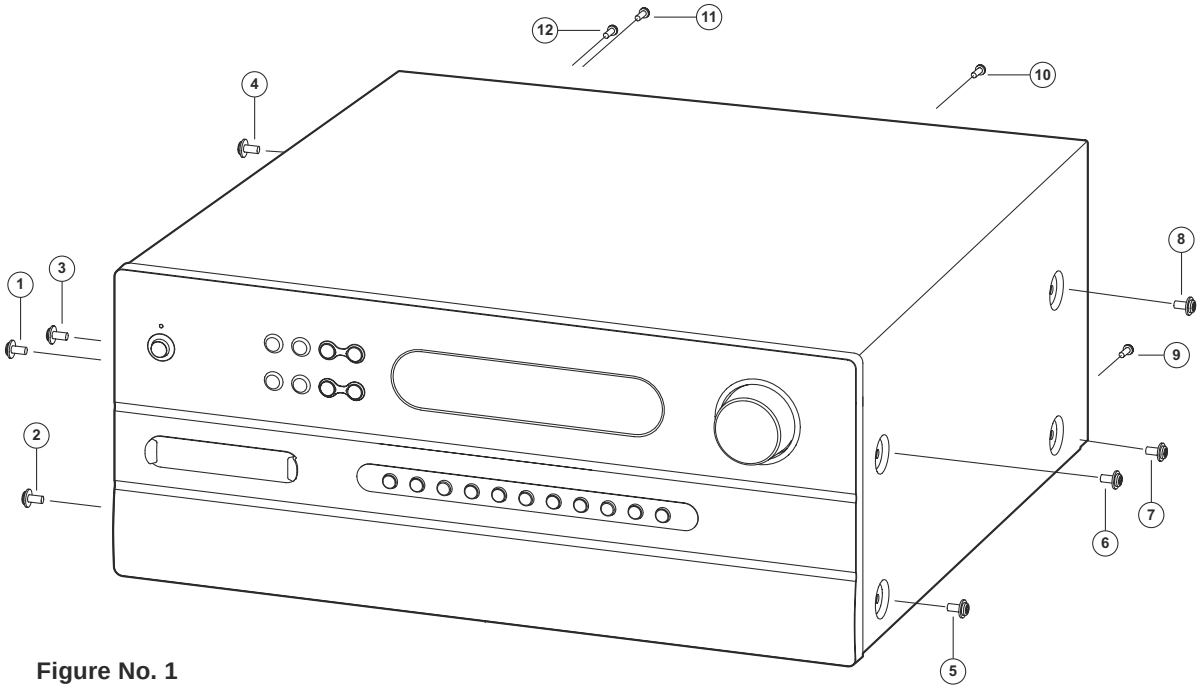


Figure No. 1

2. Pull both sides of the TOP COVER slightly outwards **13** and tilt approx. 35 ° and then remove in the direction as indicated by the arrow **14**. Refer to **Figure No. 2**.

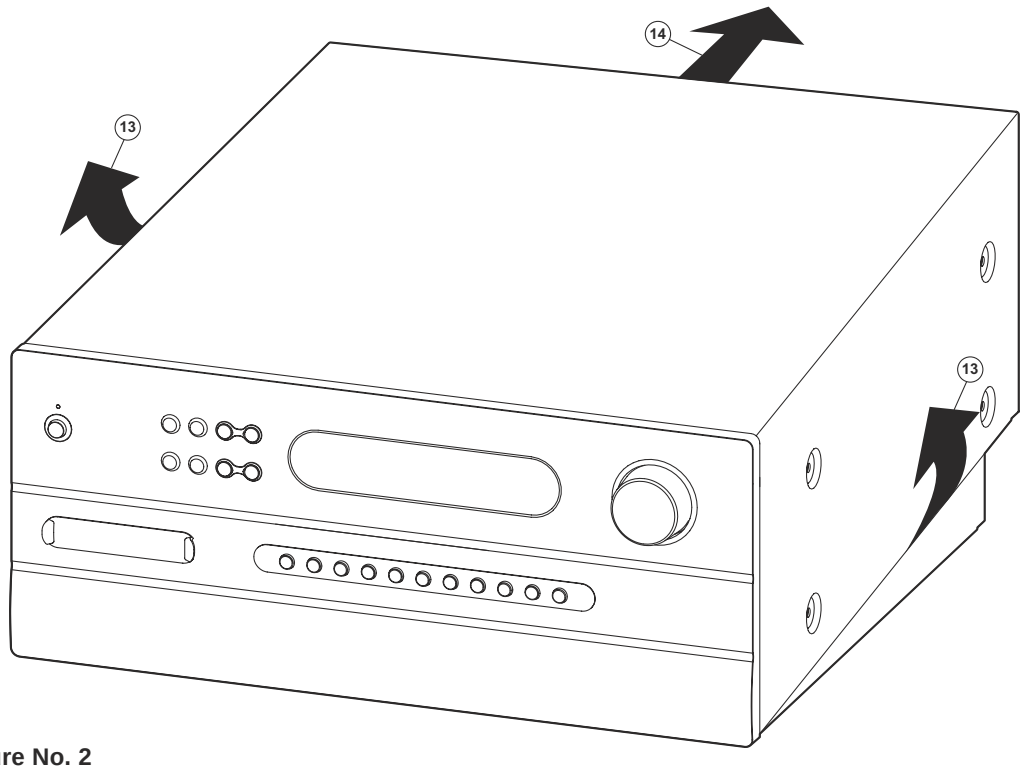
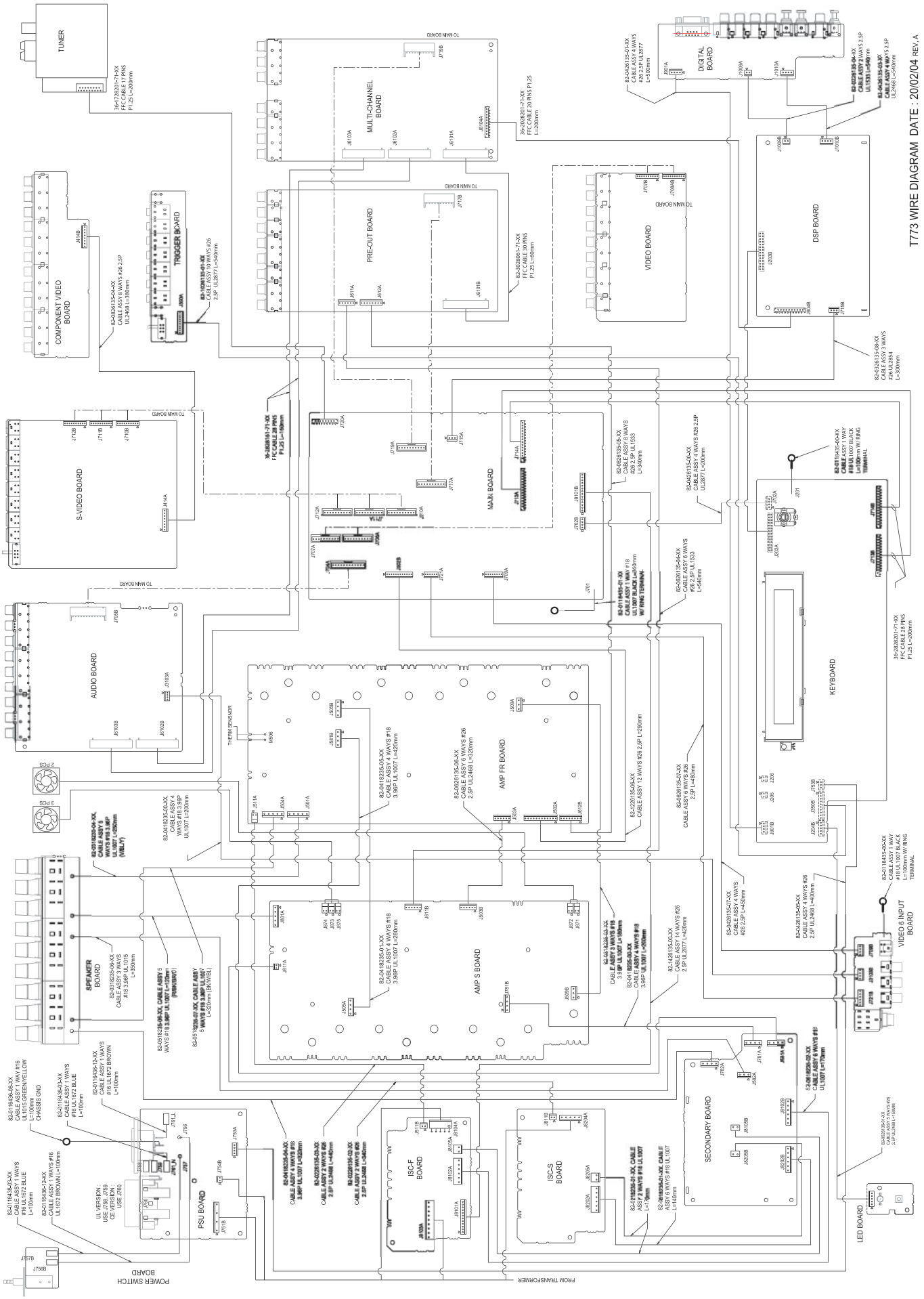
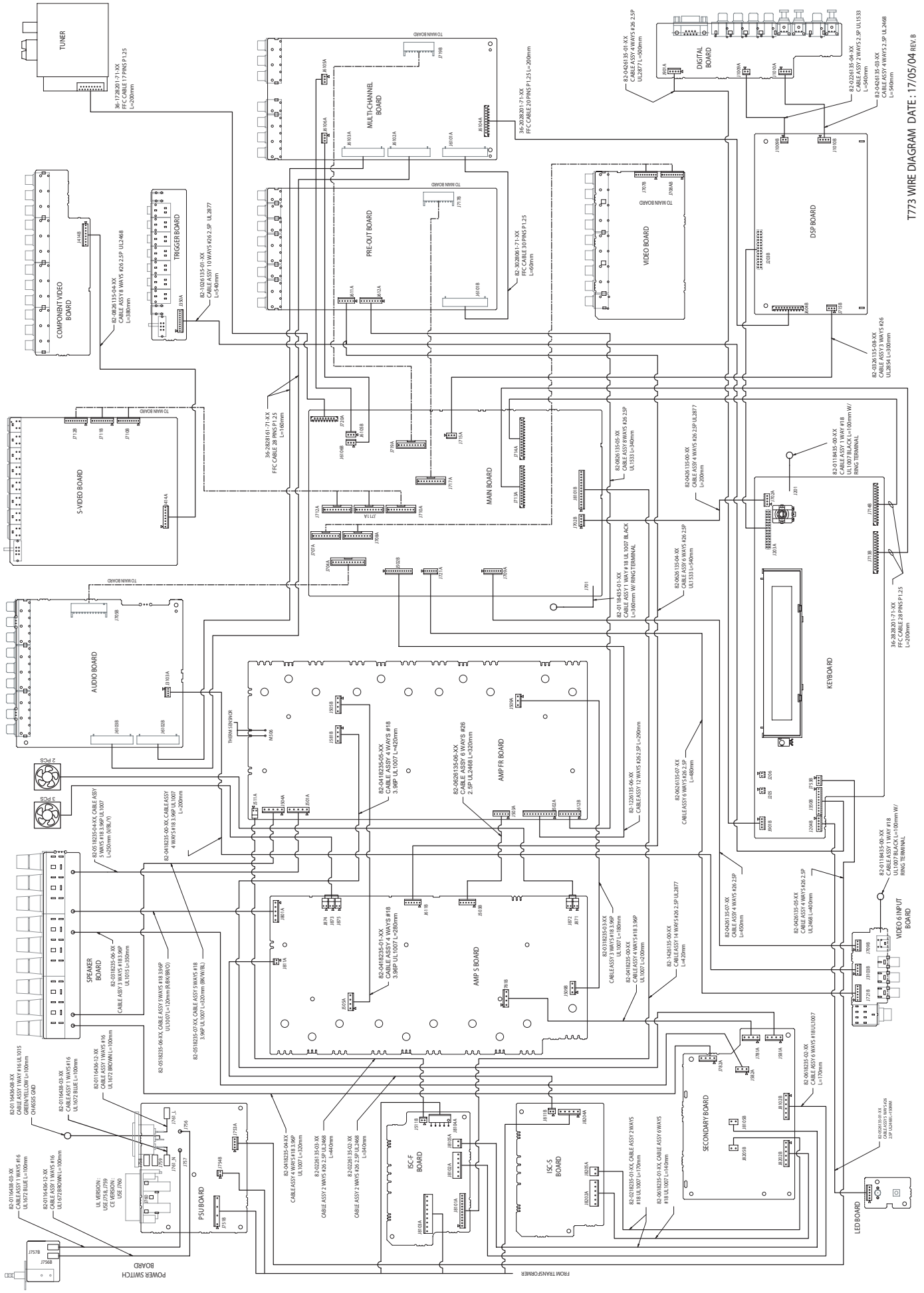


Figure No. 2

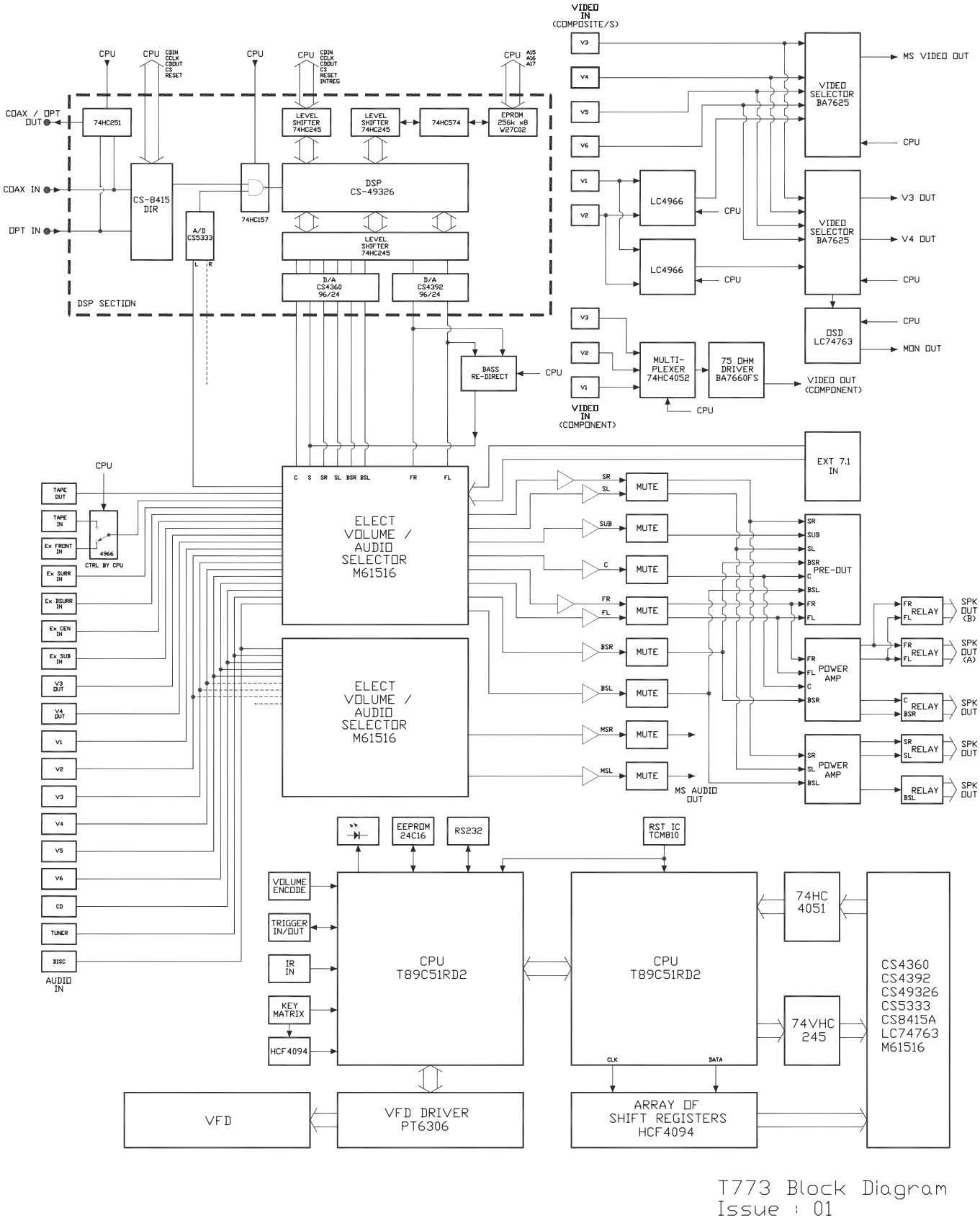
WIRING DIAGRAM



WIRING DIAGRAM



BLOCK DIAGRAM



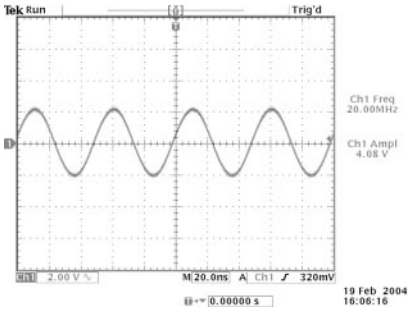
T773 Block Diagram
Issue : 01

SPECIAL FUNCTION

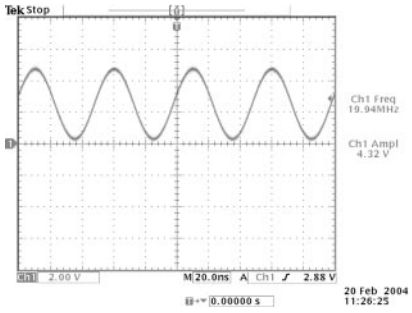
FEATURE	KEYS PRESS ON FRONT PANEL
RESET FOR AH VERSION	VIDEO + TONE DEFEAT
RESET FOR C VERSION	VIDEO + TONE CONTROLS
NTSC / PAL SELECTION	VIDEO + MEMORY
VFD ALL DISPLAY	AUDIO + TAPE MONITOR
AM FREQ. STEP	AM/FM + FM MUTE

DETAILS & WAVEFORMS ON SYSTEM TEST & DEBUGGING

T89C51RD2 (U202) main clock is at 20MHz (X202)

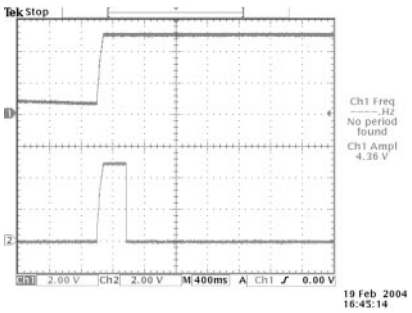


T89C51RD2 (U201) main clock is at 20MHz (X201)



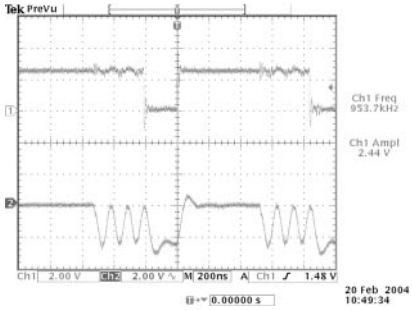
UPPER - +5V supply to KEYBOARD when power up

LOWER - RESET line (TCM810LENB713) when power up

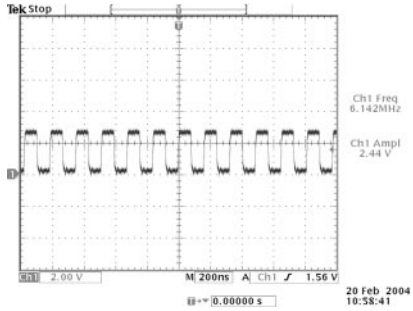


UPPER - OUTPUT ENABLE (pin 24) of EPROM (W27C02) when changing SURROUND MODES

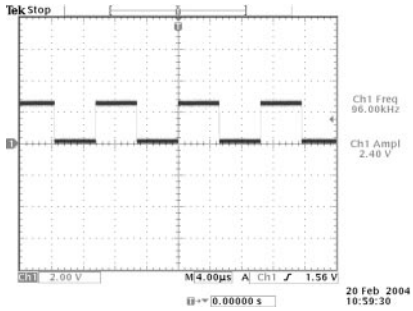
LOWER - CHIP ENABLE (pin 22) of EPROM (W27C02) when changing SURROUND MODES



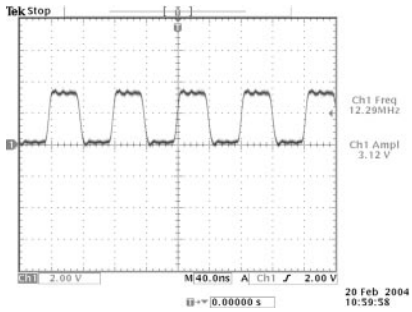
SCLK (pin 43 of CS49326)



LRCLK (pin 42 of CS49326)



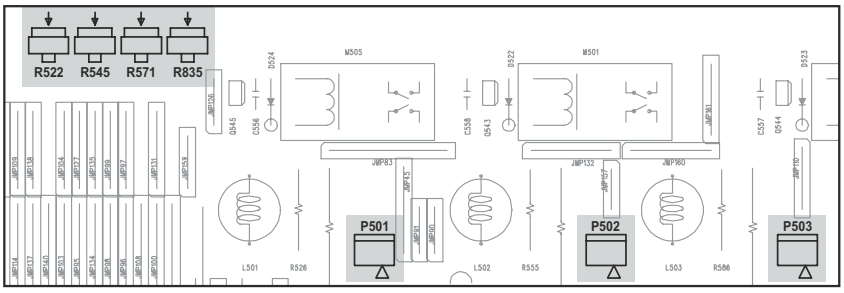
MCLK (pin 30 of CS49326)



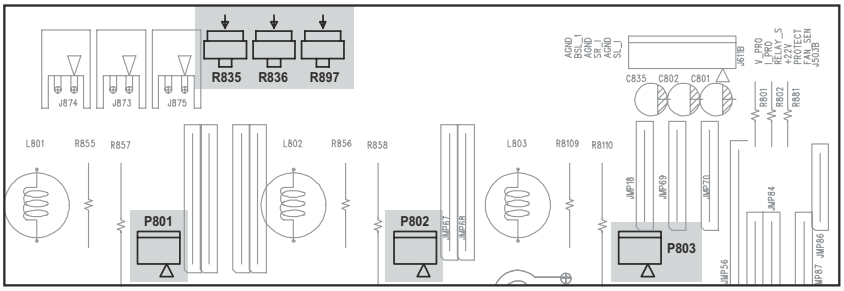
NOTE: The waveforms are based on software version V1.26.

ADJUSTMENT POINT DIAGRAM

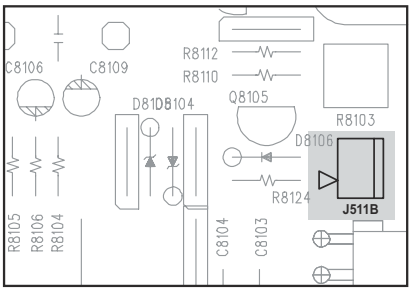
FRONT/CENTER AMPLIFIER BOARD



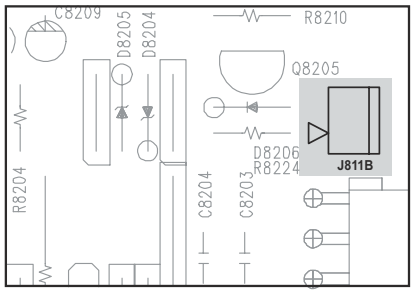
SURROUND AMPLIFIER BOARD



ISC FRONT AMP BOARD



ISC SURROUND AMP BOARD



AMPLIFIER ADJUSTMENT

Idle Current

1. Rotate R522 fully clockwise.
2. Connect DC millivoltmeter to P501 (i.e. Across half of R523, 0.22 Ohm resistor).
3. Turn on the unit.
4. Adjust R522 for 2mV reading on voltmeter.
5. Leave power on for at least 5 min, and check for idle current again.
6. Repeat for other channels.

(IN FRONT POWER AMP PCB)

CHANNEL	JUMPER	VR
FL	P502	R545
FR	P53	R571
C	P503	R571
BSR	P501	R522

(IN SURROUND POWER AMP PCB)

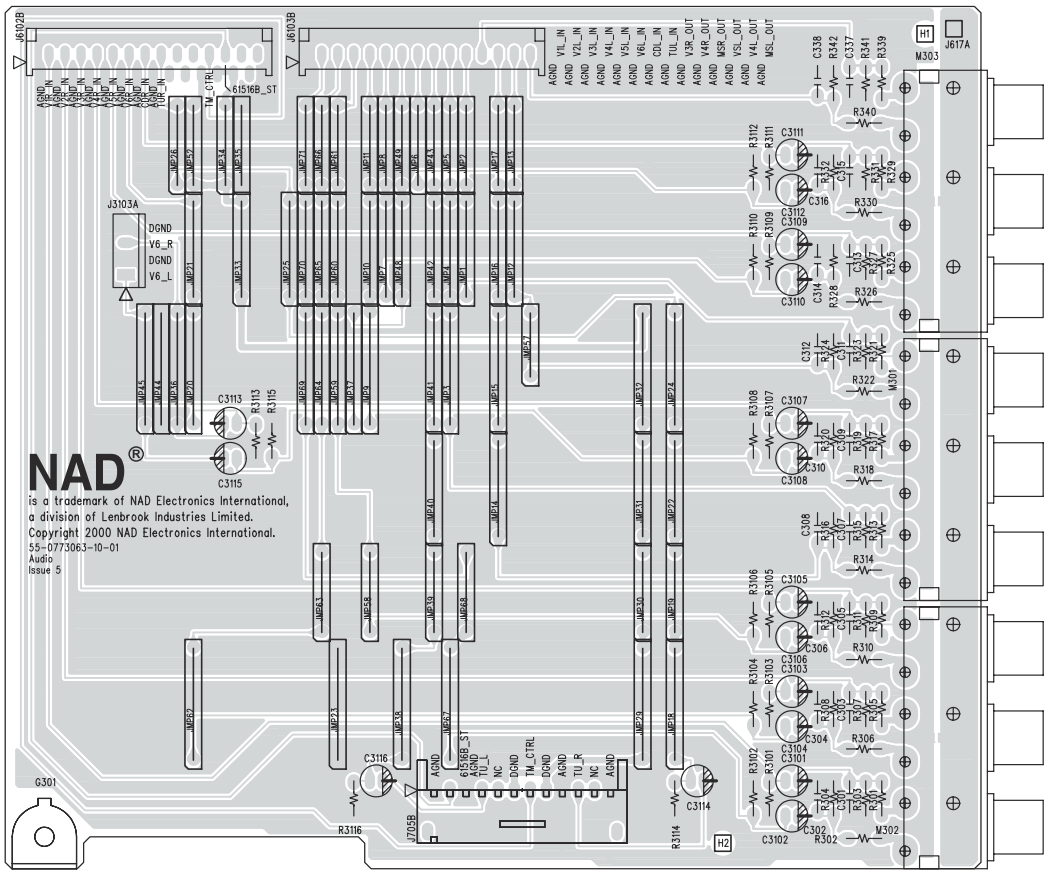
CHANNEL	JUMPER	VR
SL	P801	R835
SR	P802	R836
BSL	P803	R897

ISC Sensitivity

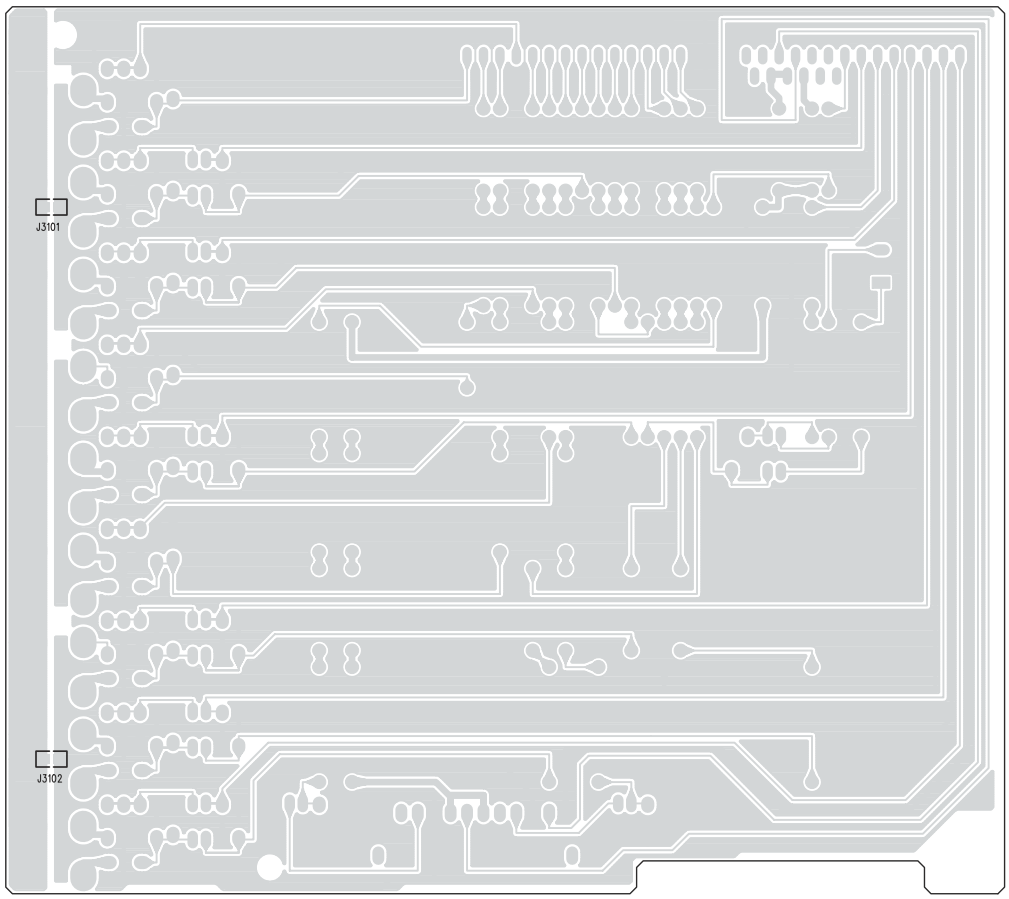
Rotate J511B & J811B fully clockwise.

PCB LAYOUT

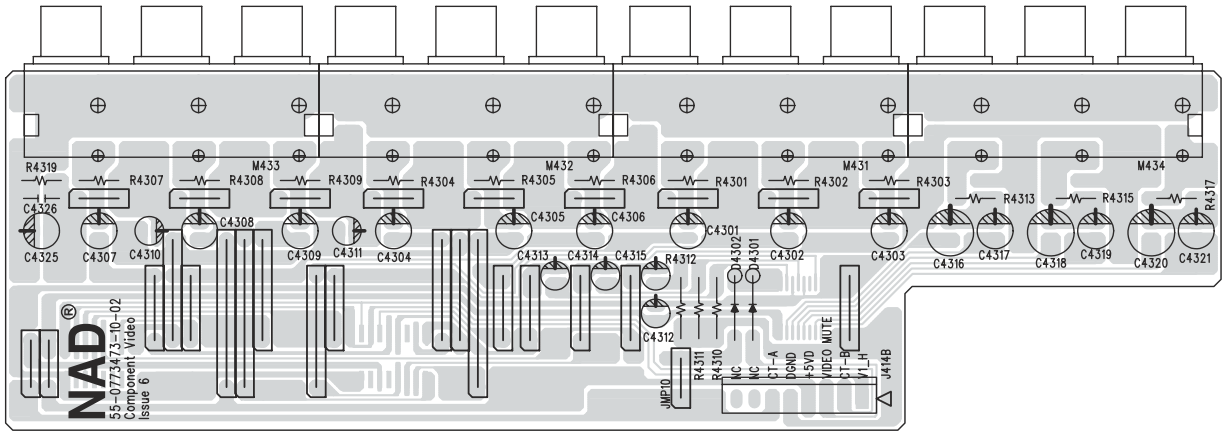
AUDIO BOARD - COMPONENT SIDE



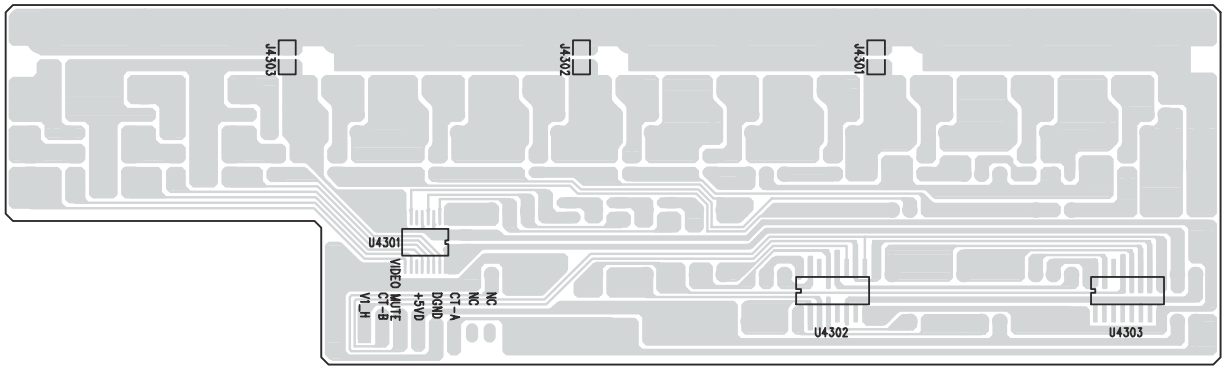
AUDIO BOARD - COPPER SIDE



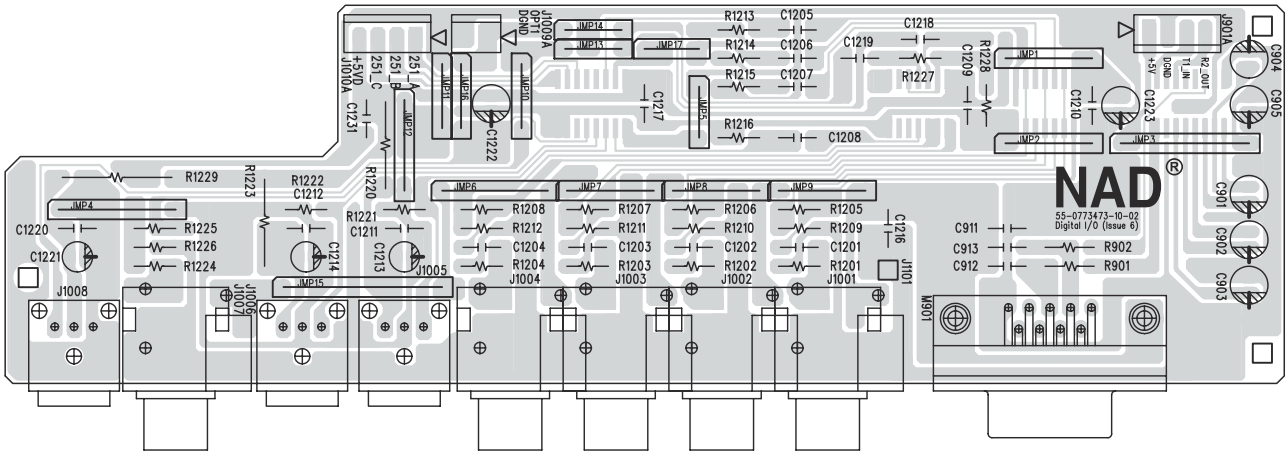
COMPONENT VIDEO BOARD - COMPONENT SIDE



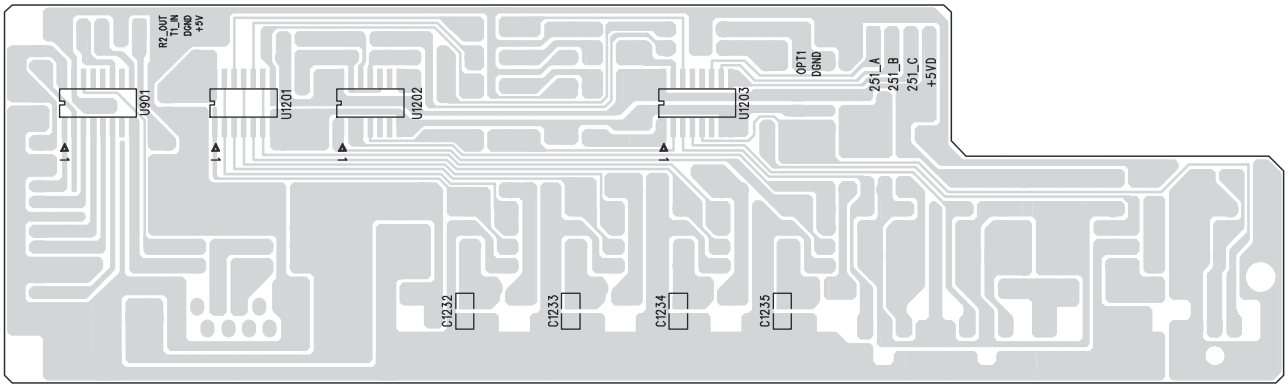
COMPONENT VIDEO BOARD - COPPER SIDE



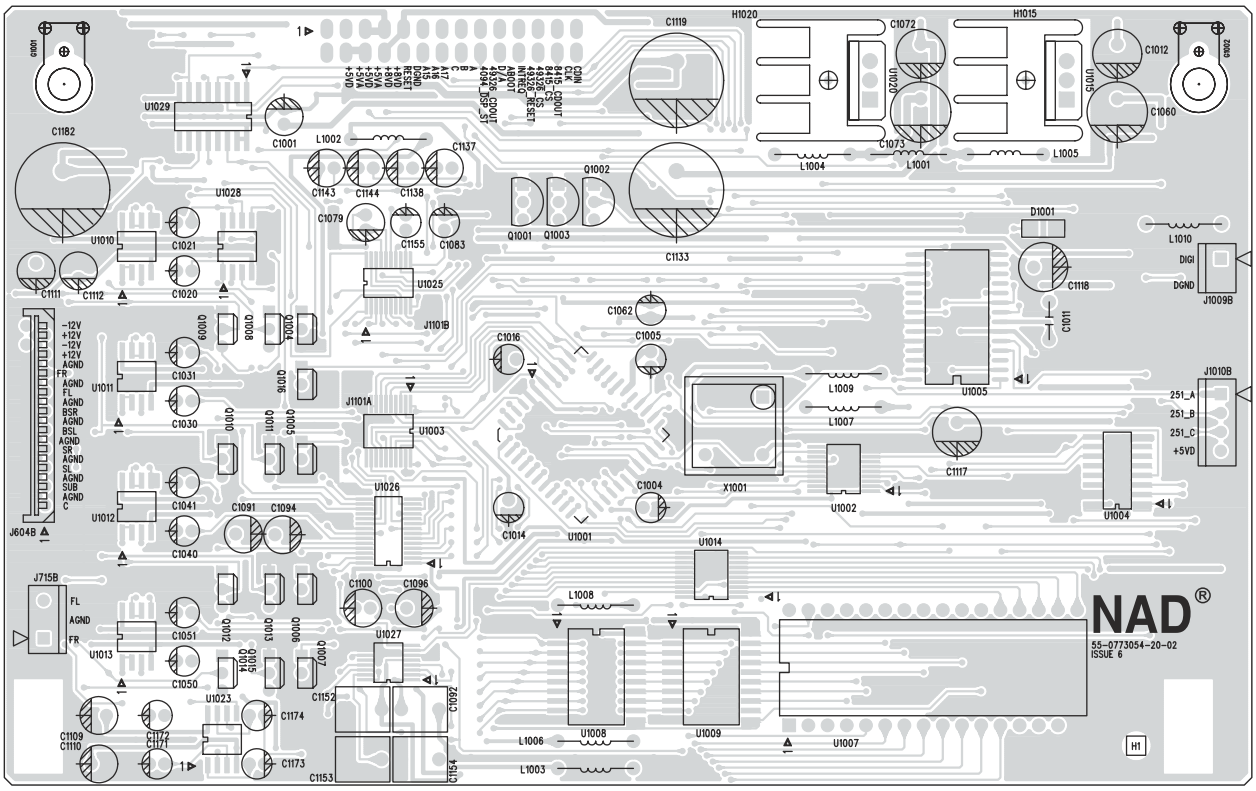
DIGITAL BOARD - COMPONENT SIDE



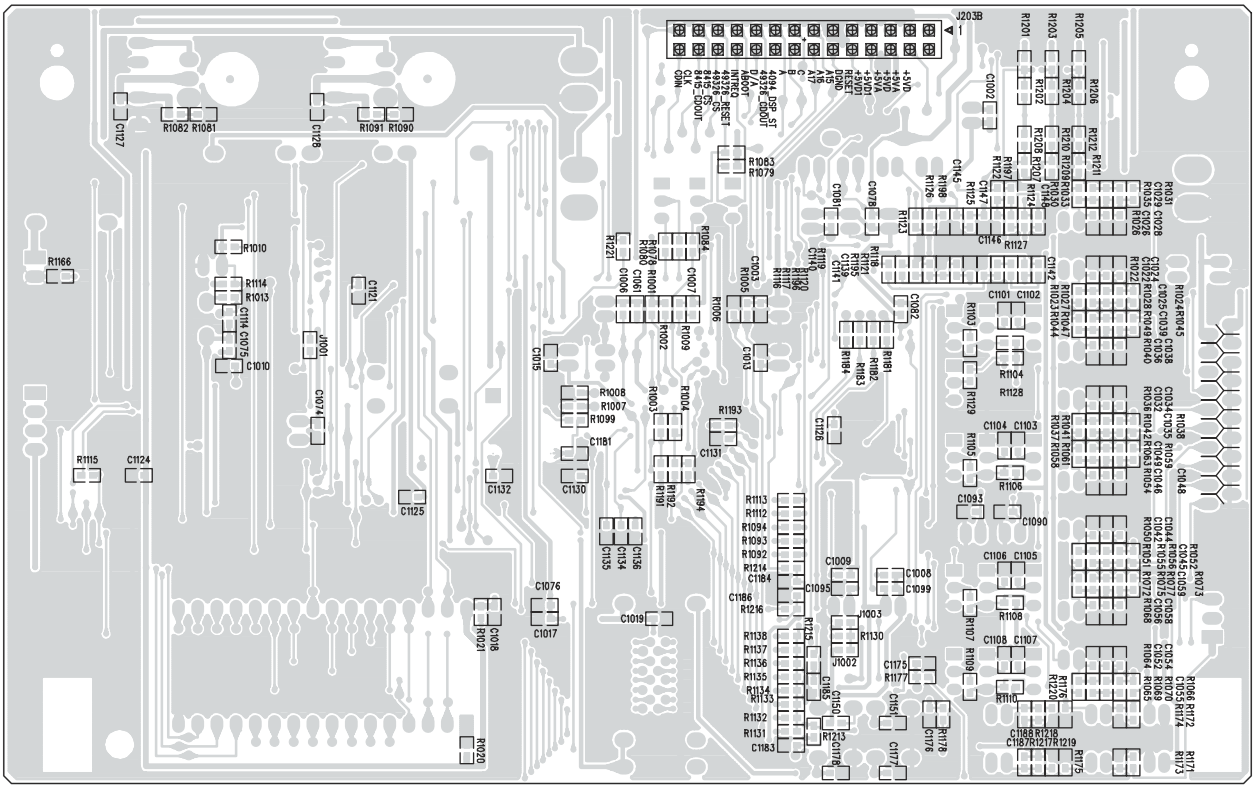
DIGITAL BOARD - COPPER SIDE



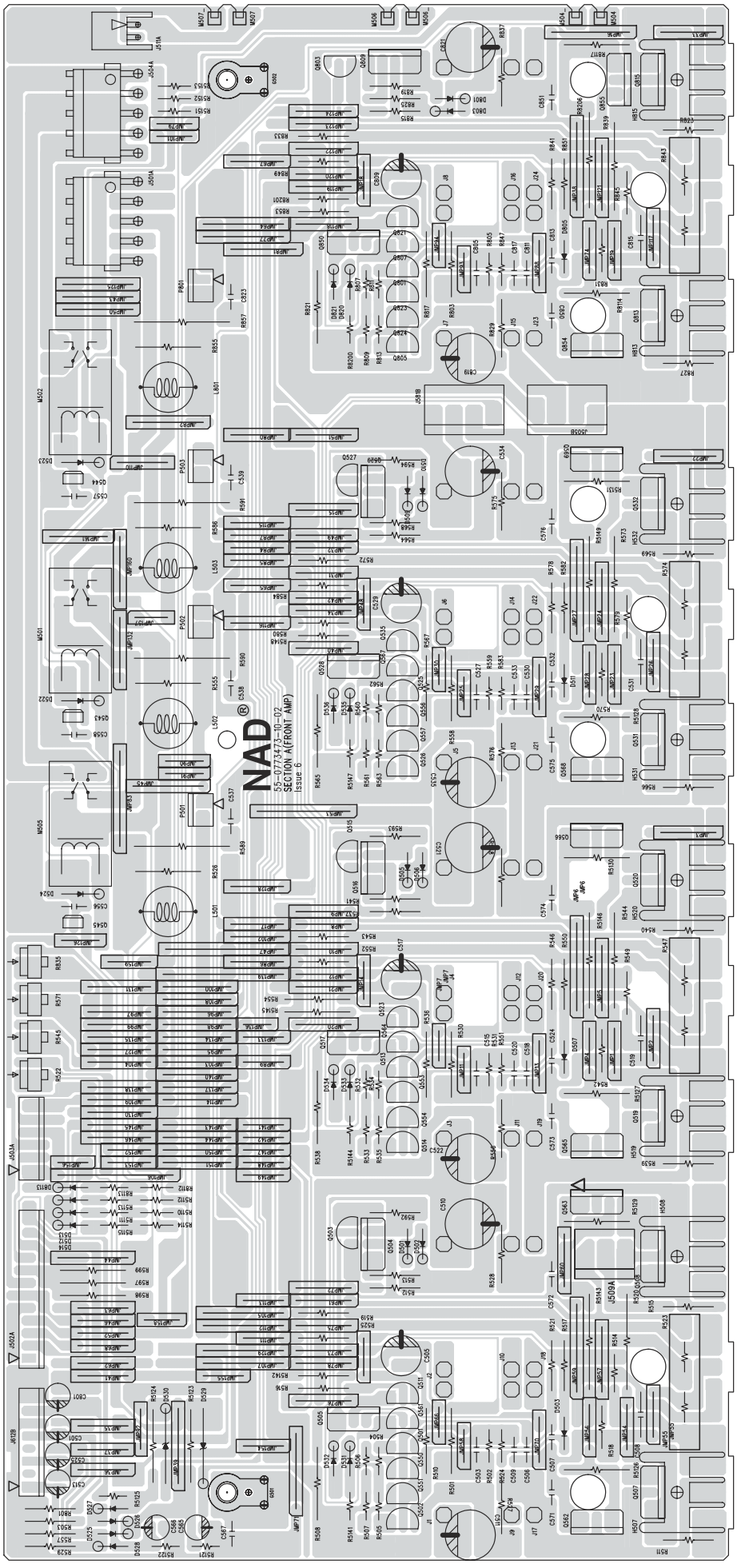
DSP BOARD - COMPONENT SIDE



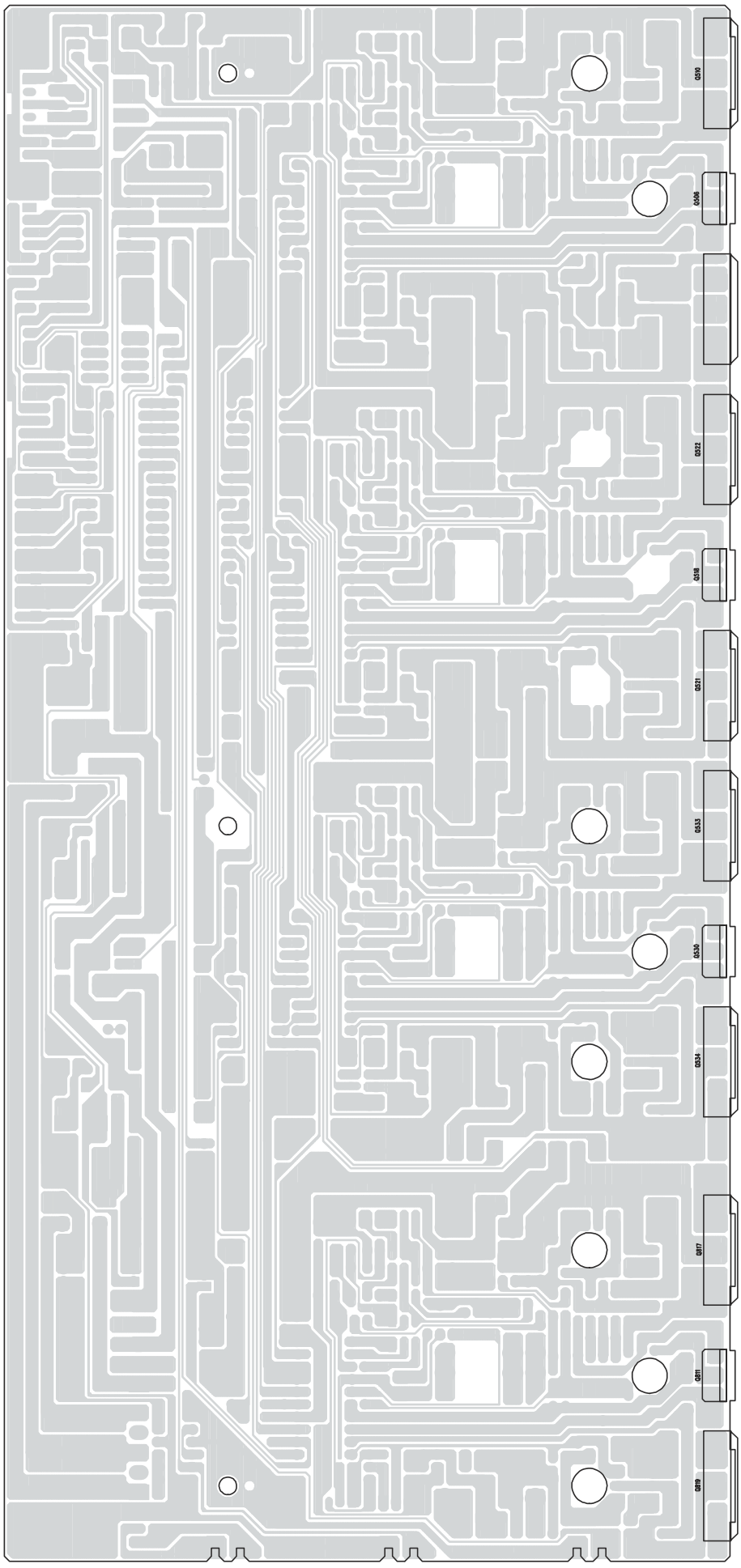
DSP BOARD - COPPER SIDE



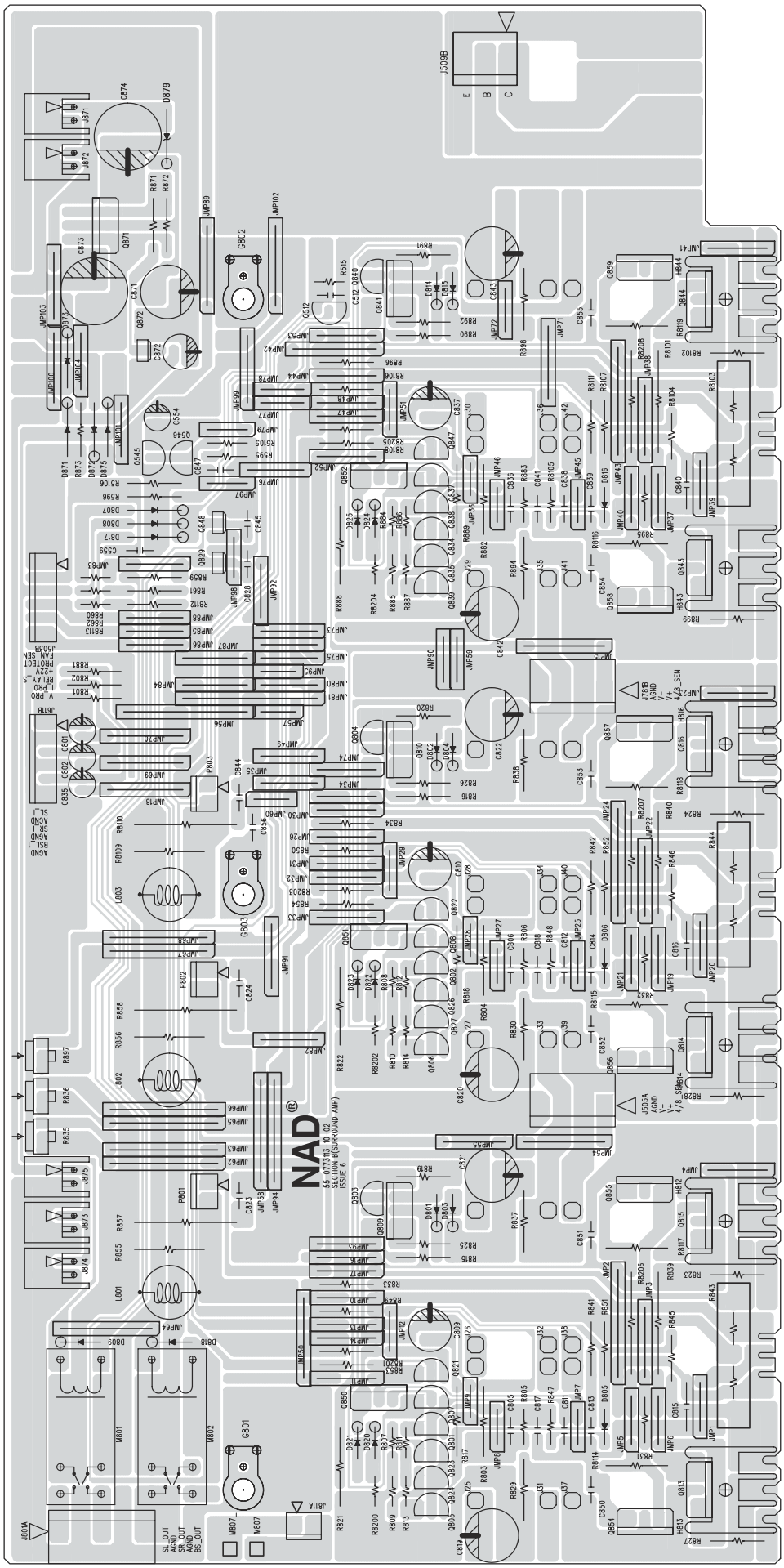
FRONT/CENTER AMPLIFIER BOARD - COMPONENT SIDE



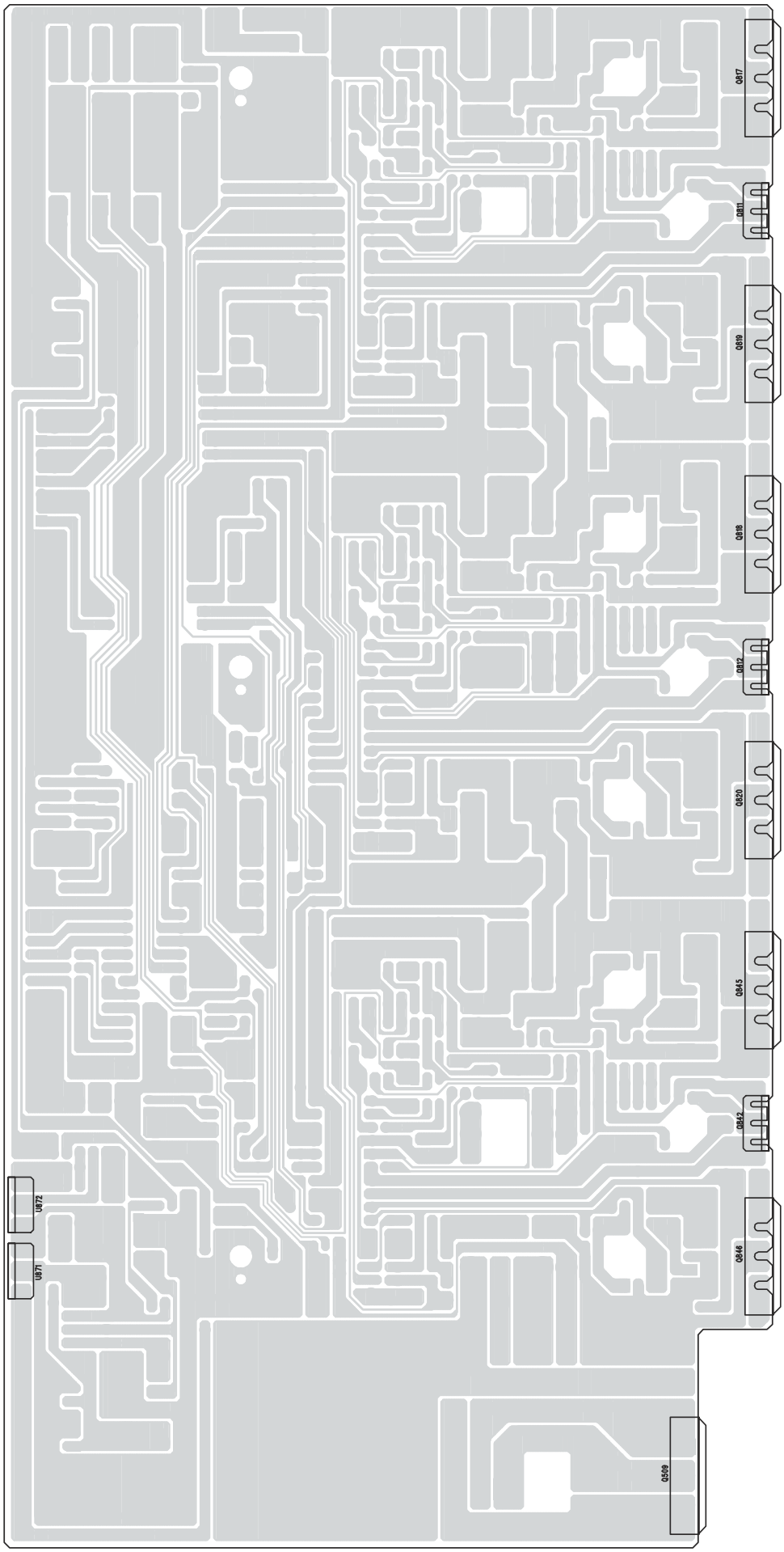
FRONT/CENTER AMPLIFIER BOARD - COPPER SIDE



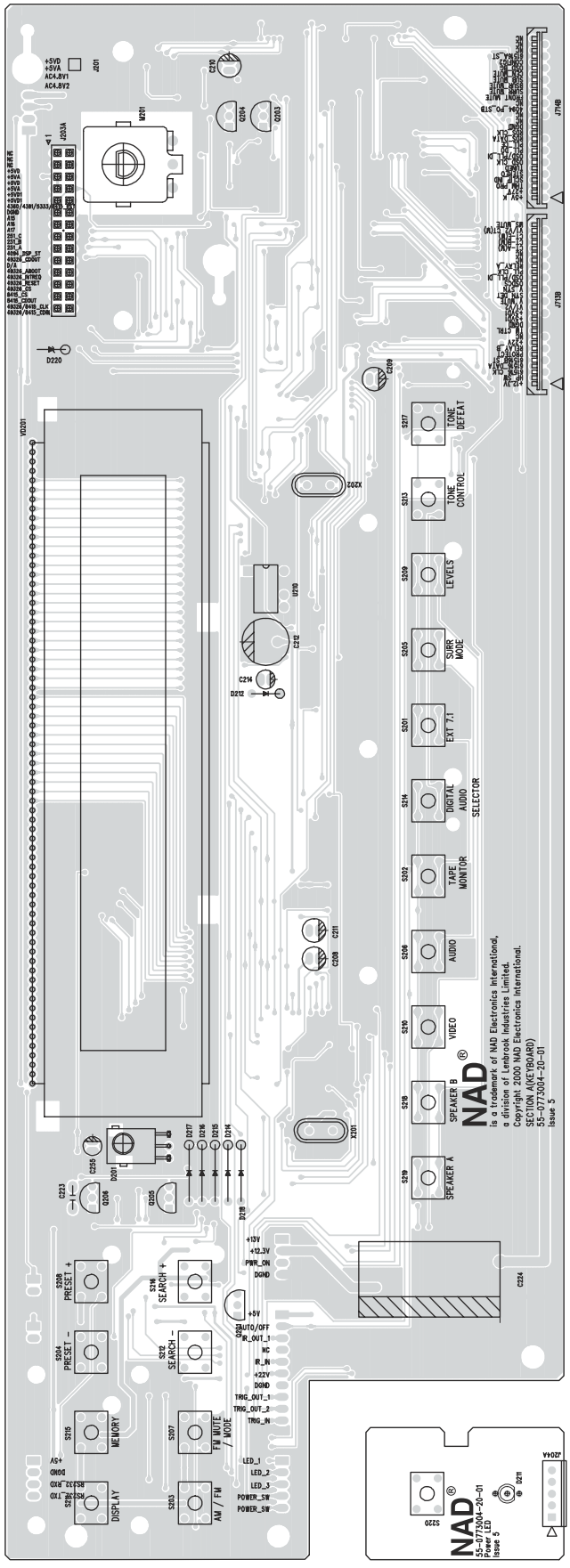
SURROUND AMPLIFIER BOARD - COMPONENT SIDE



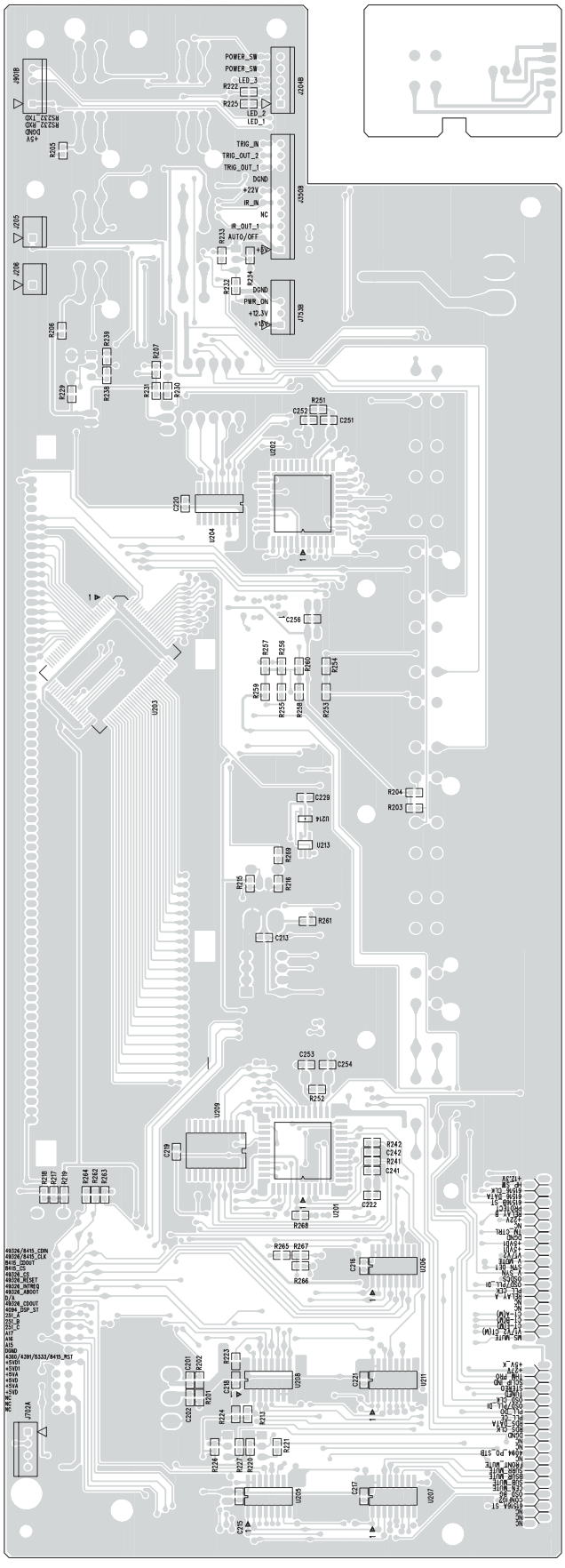
SURROUND AMPLIFIER BOARD - COPPER SIDE



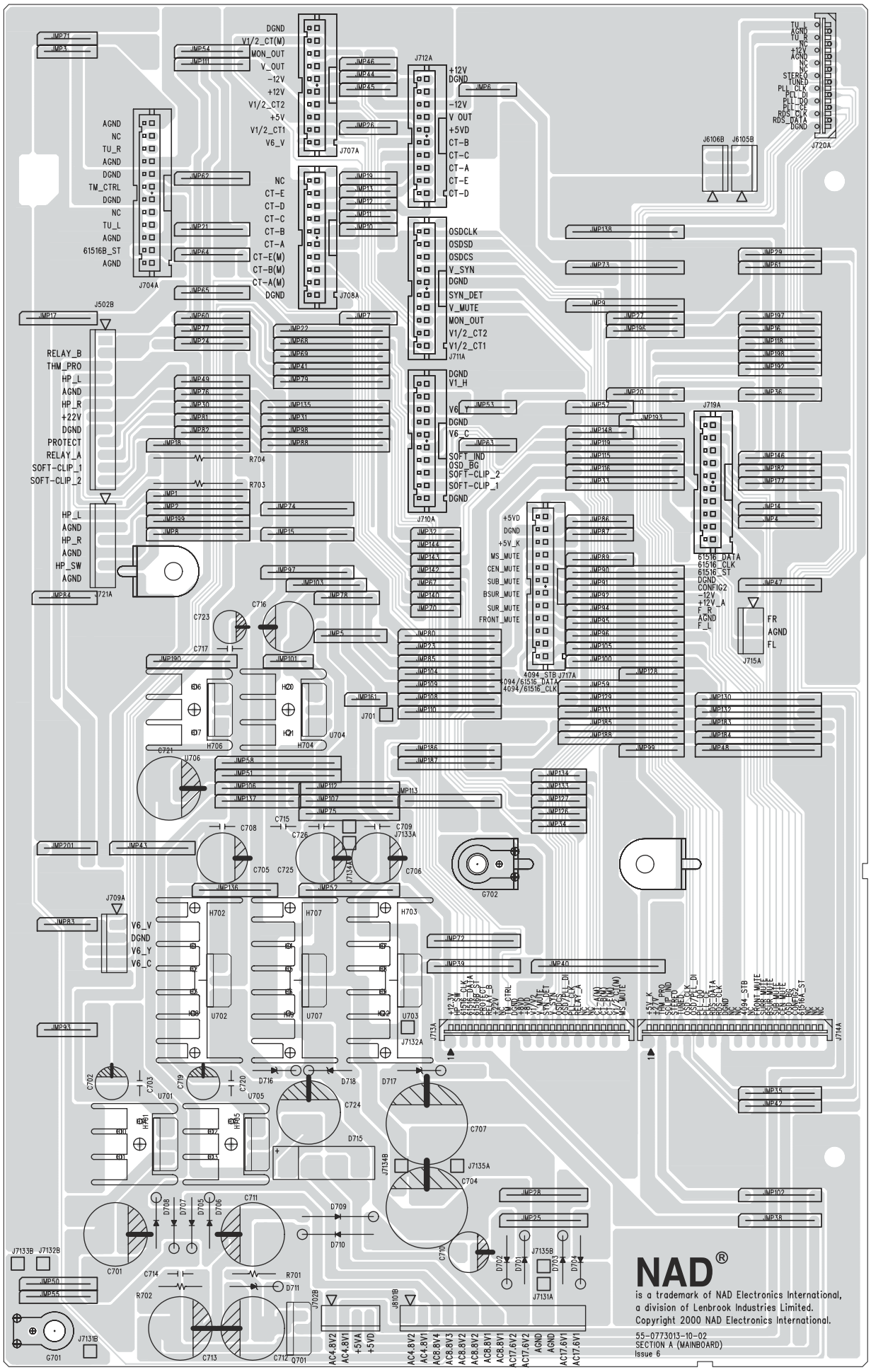
KEY BOARD / LED BOARD - COMPONENT SIDE



KEY BOARD / LED BOARD - COPPER SIDE



MAIN BOARD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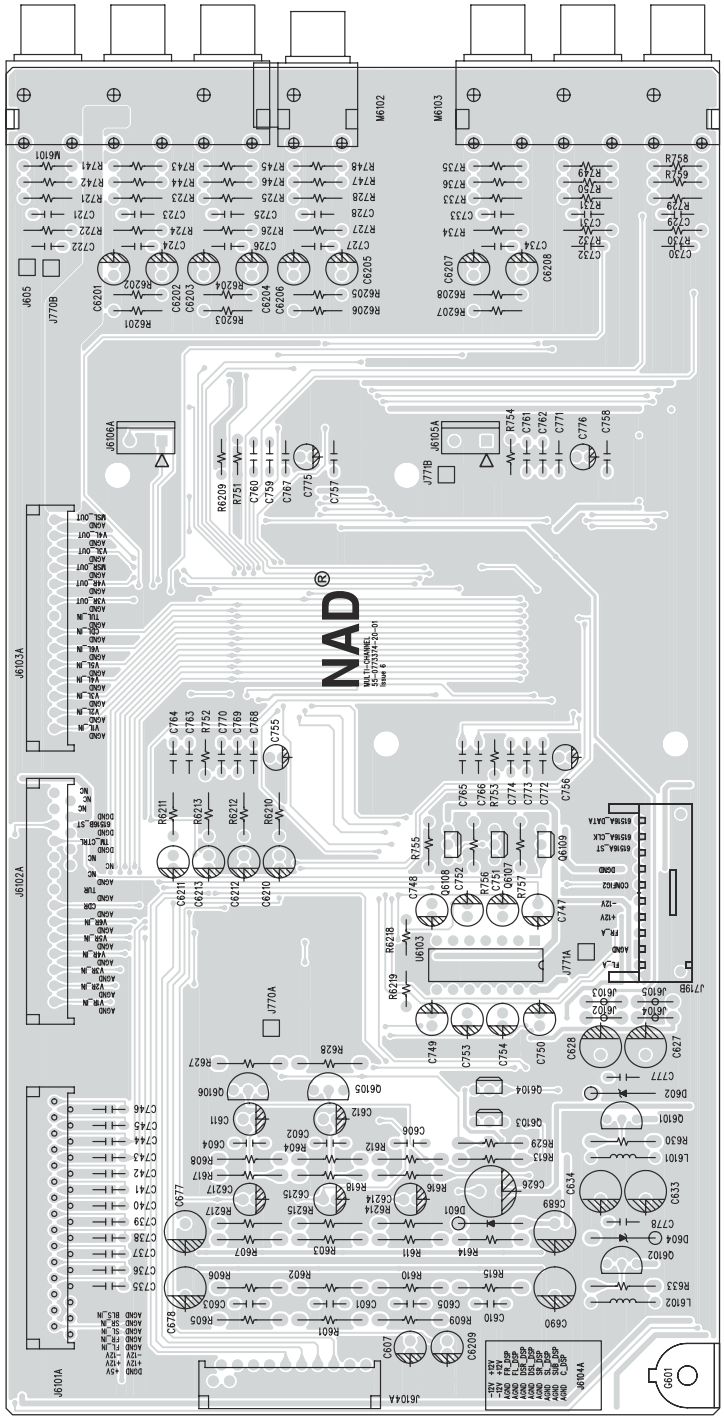
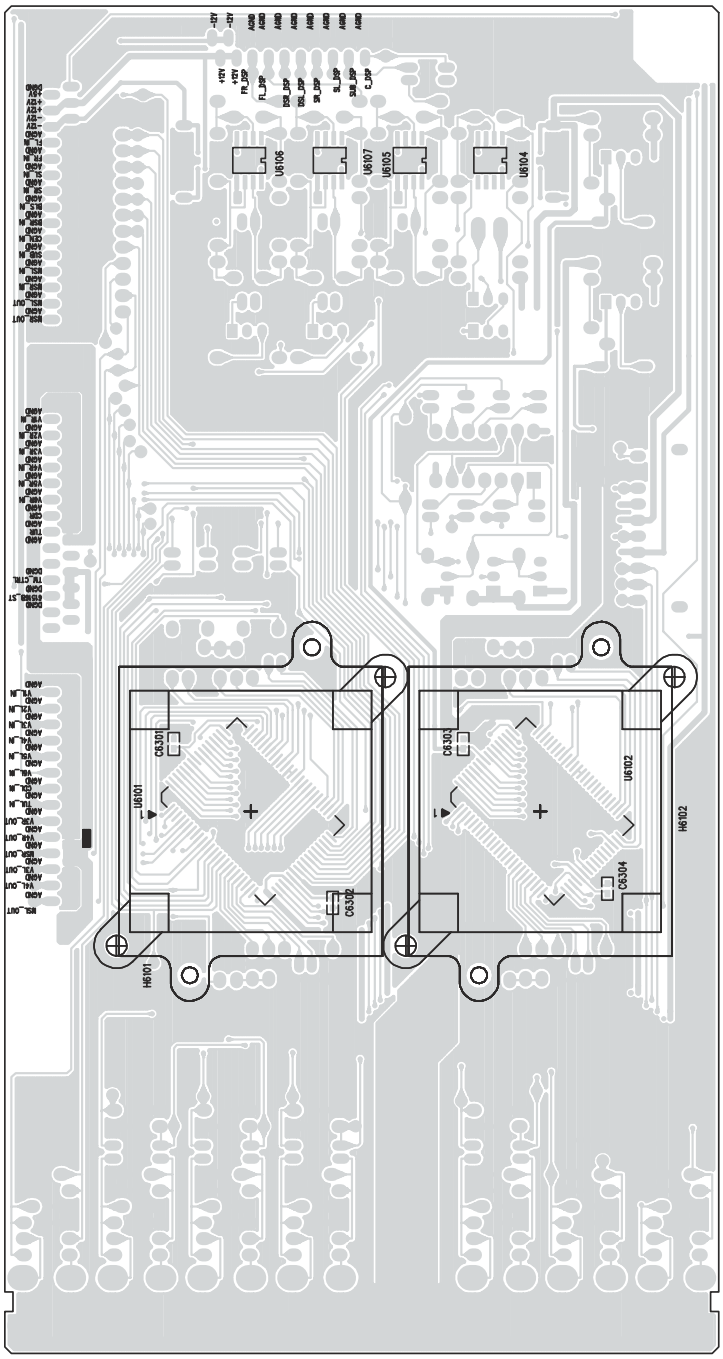
55-0773013-10-02
SECTION A (MAINBOARD)
Issue 6

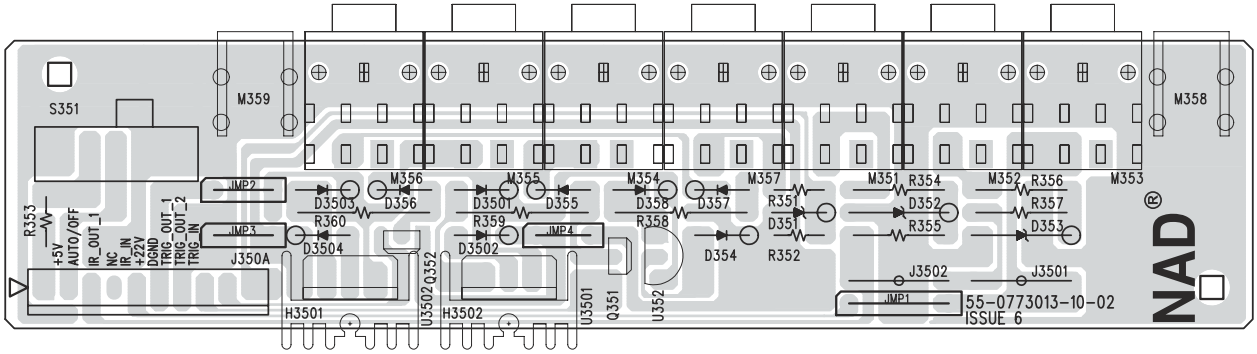
MULTI-CHANNEL BOARD
- COMPONENT SIDE



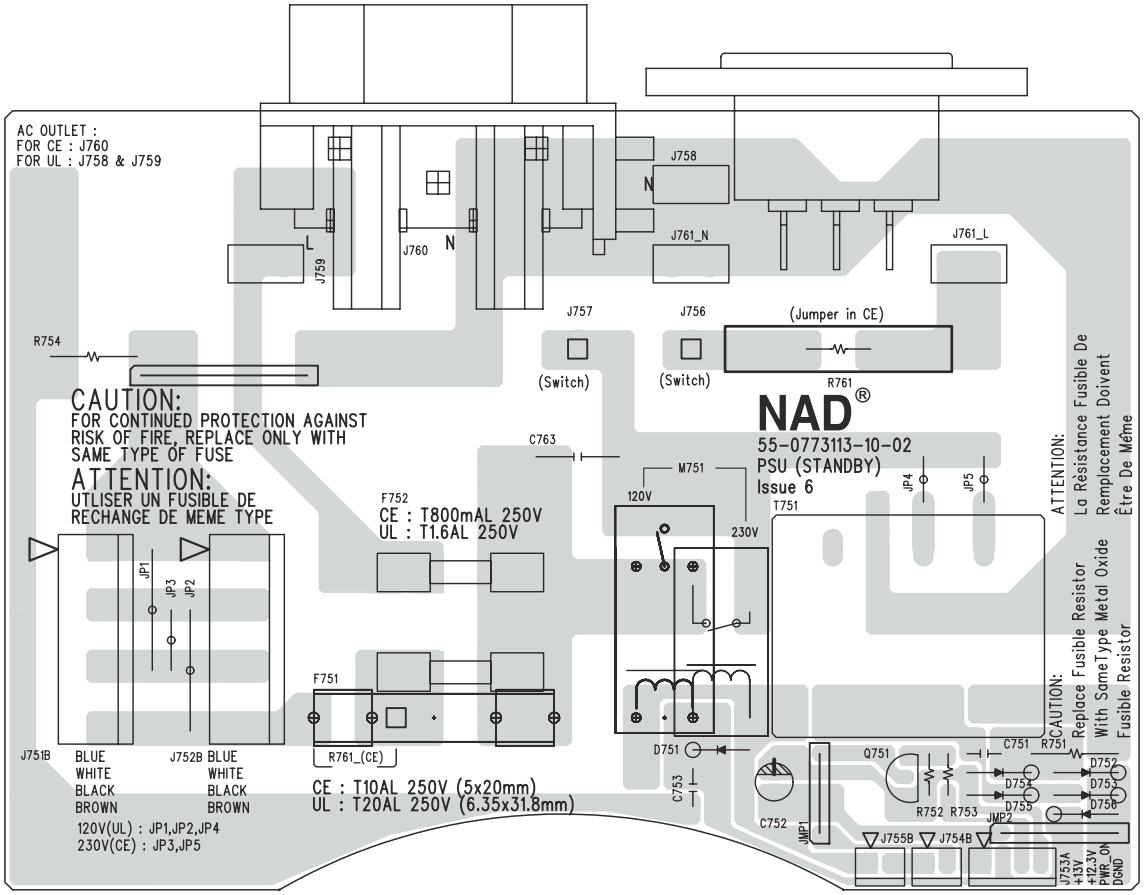
- COPPER SIDE



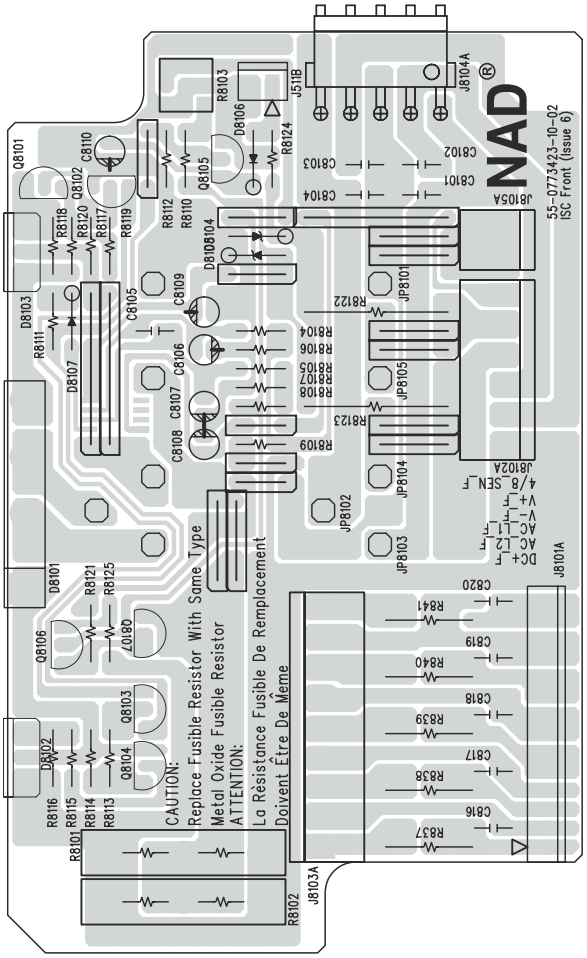
TRIGGER BOARD



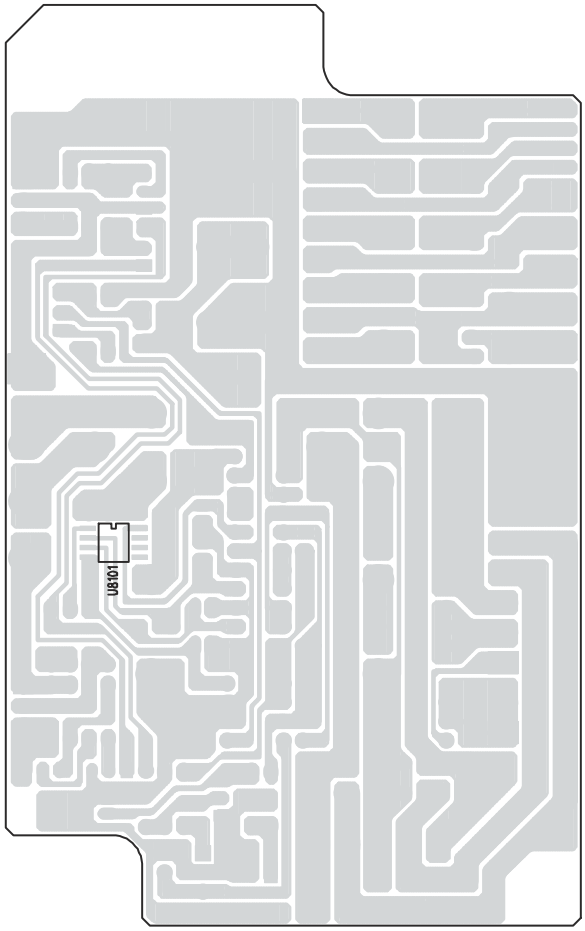
POWER SUPPLY (STANDBY)



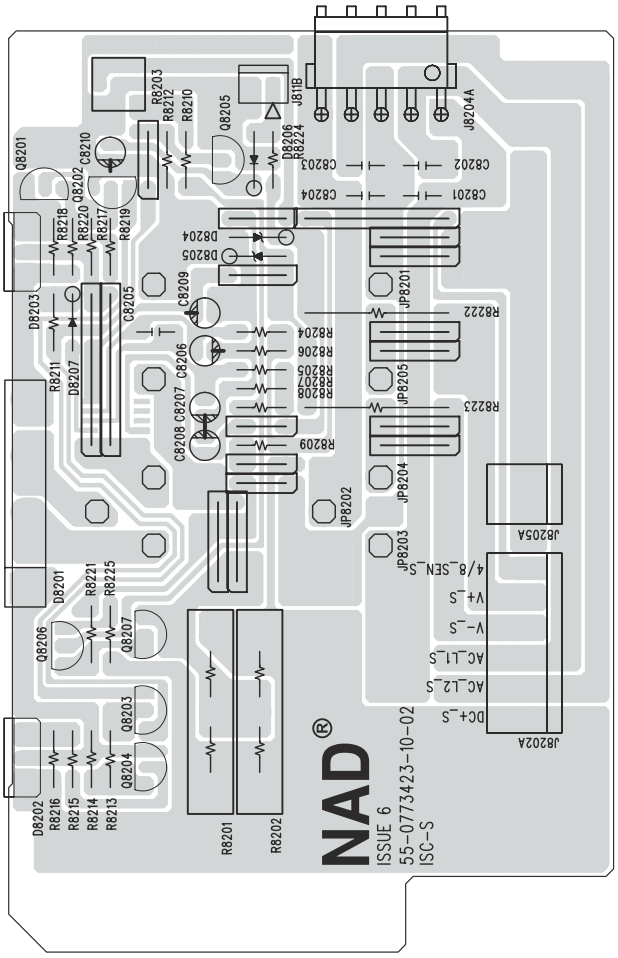
ISC FOR FRONT AMP BOARD
- COMPONENT SIDE



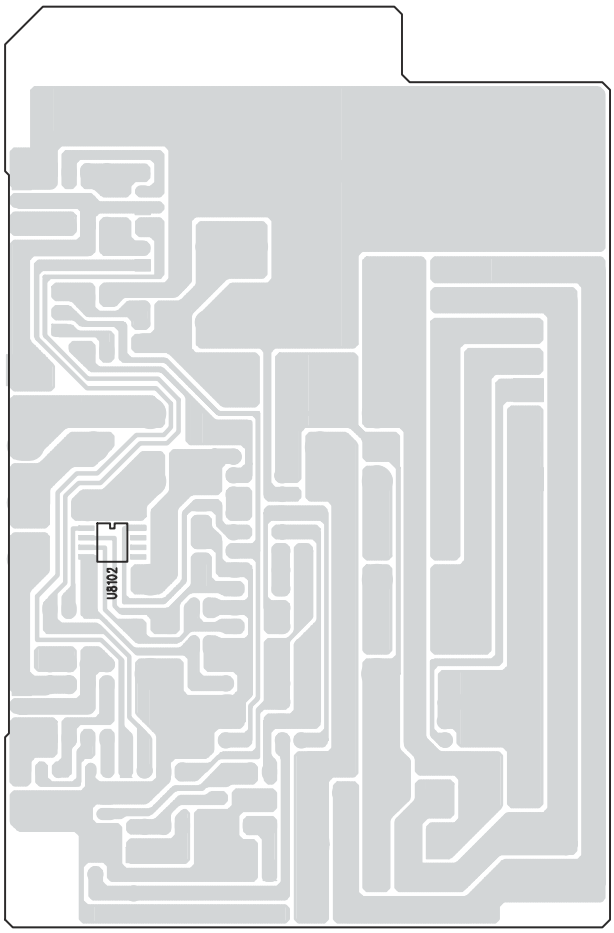
- COPPER SIDE



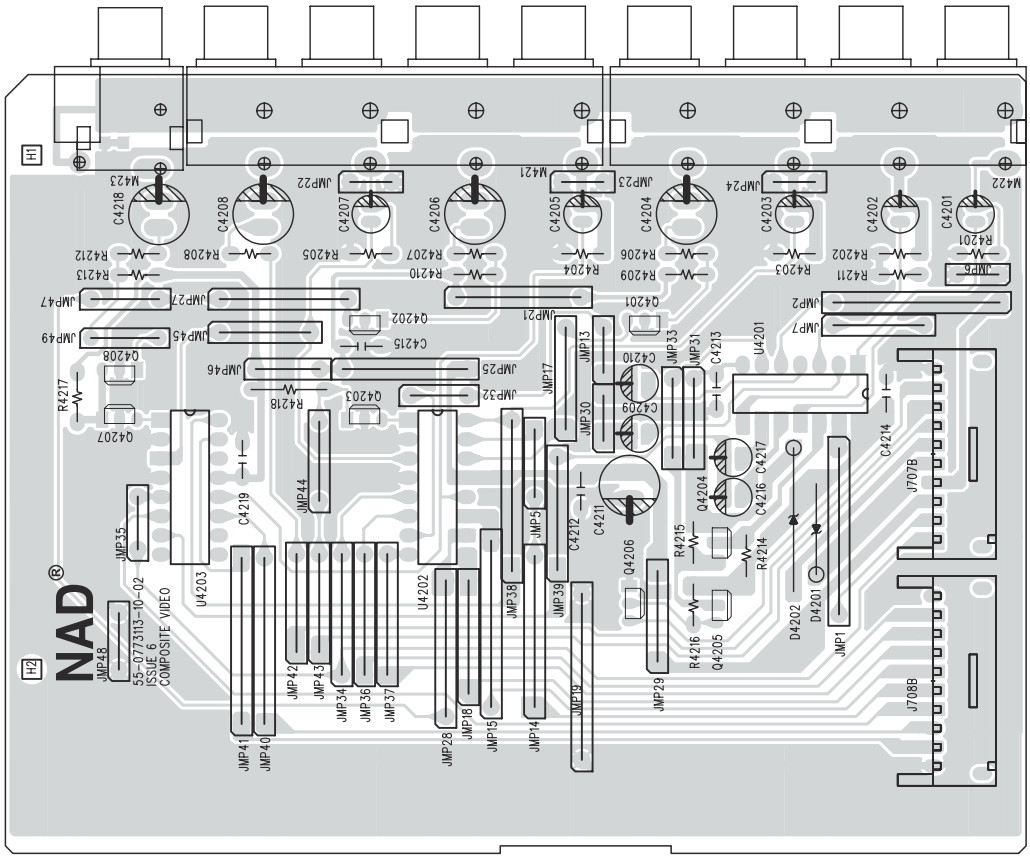
ISC FOR SURROUND AMP BOARD
- COMPONENT SIDE



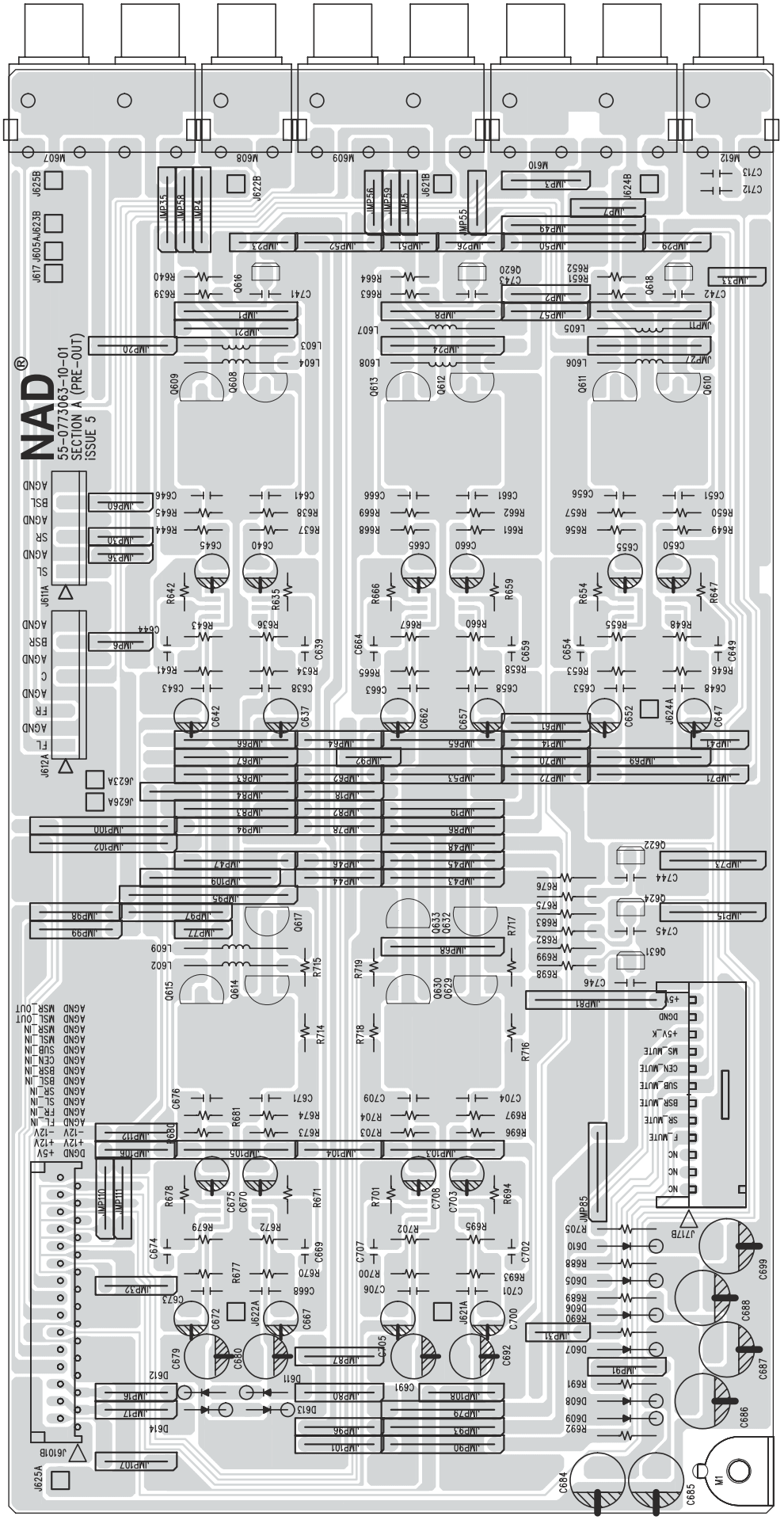
- COPPER SIDE



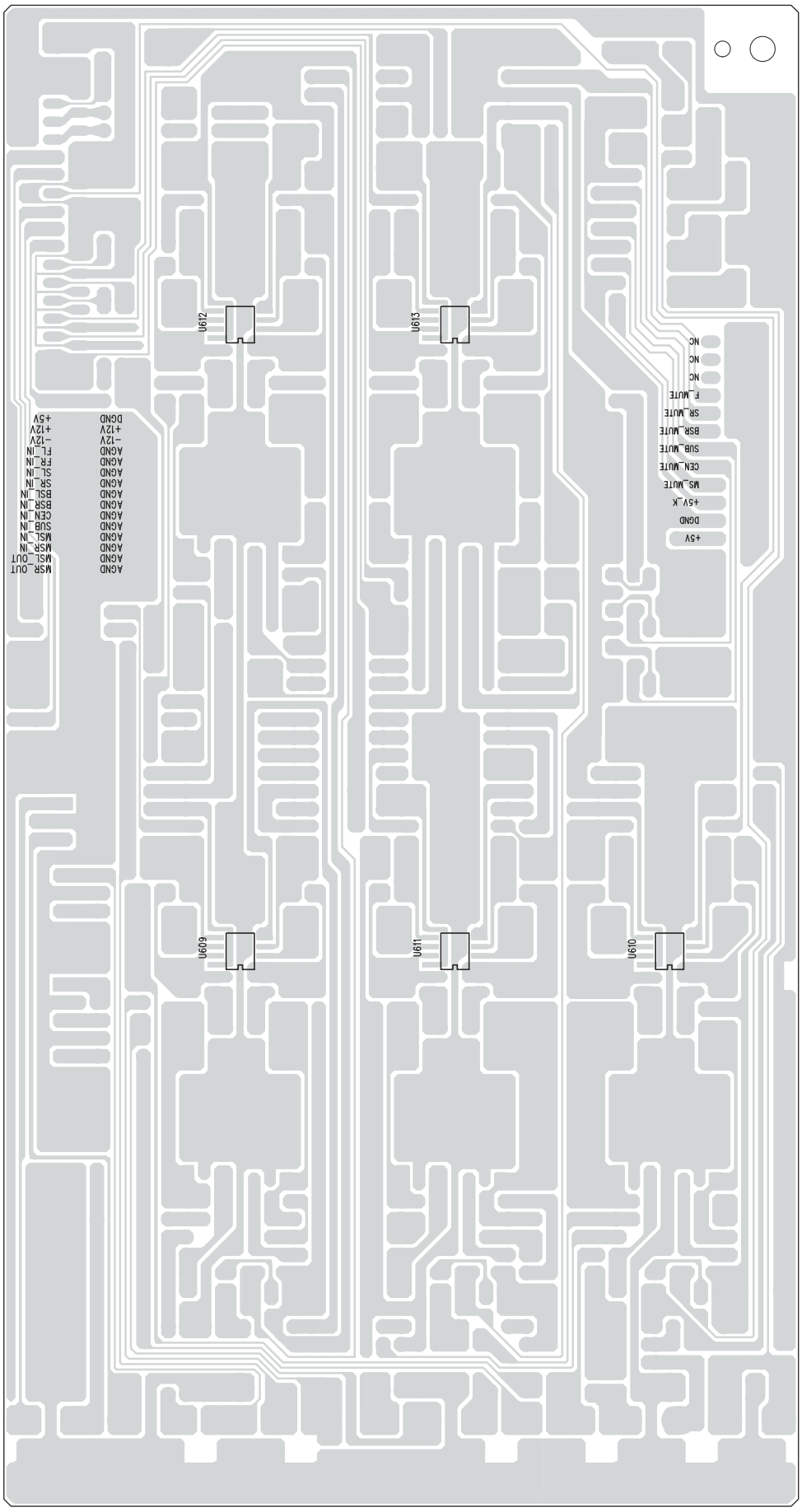
COMPOSITE VIDEO BOARD



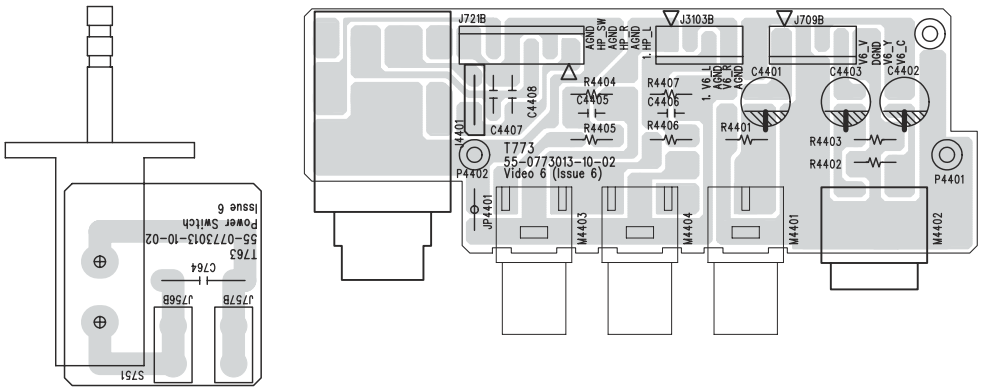
PRE-OUT BOARD - COMPONENT SIDE



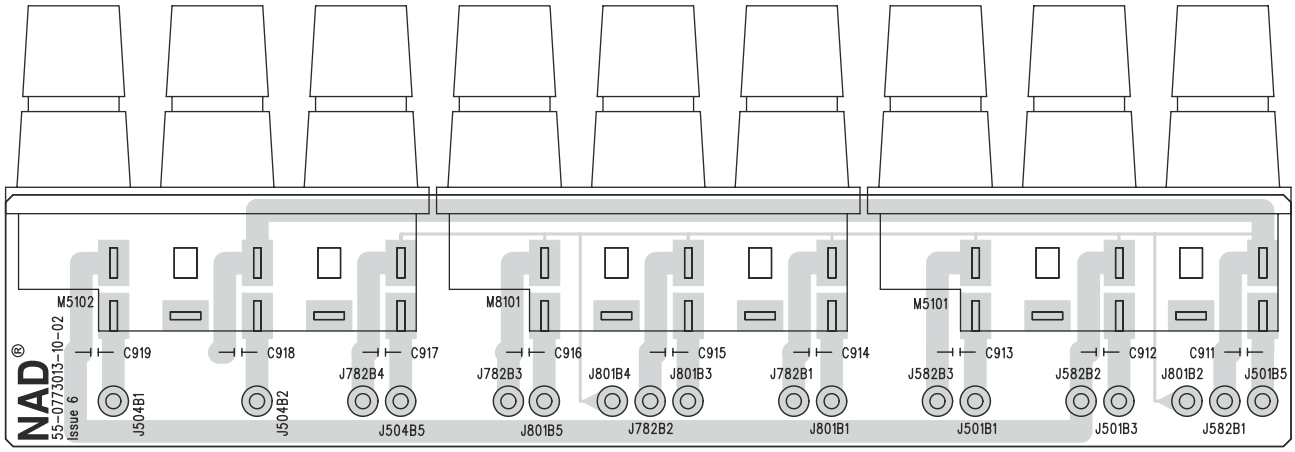
PRE-OUT BOARD - COPPER SIDE



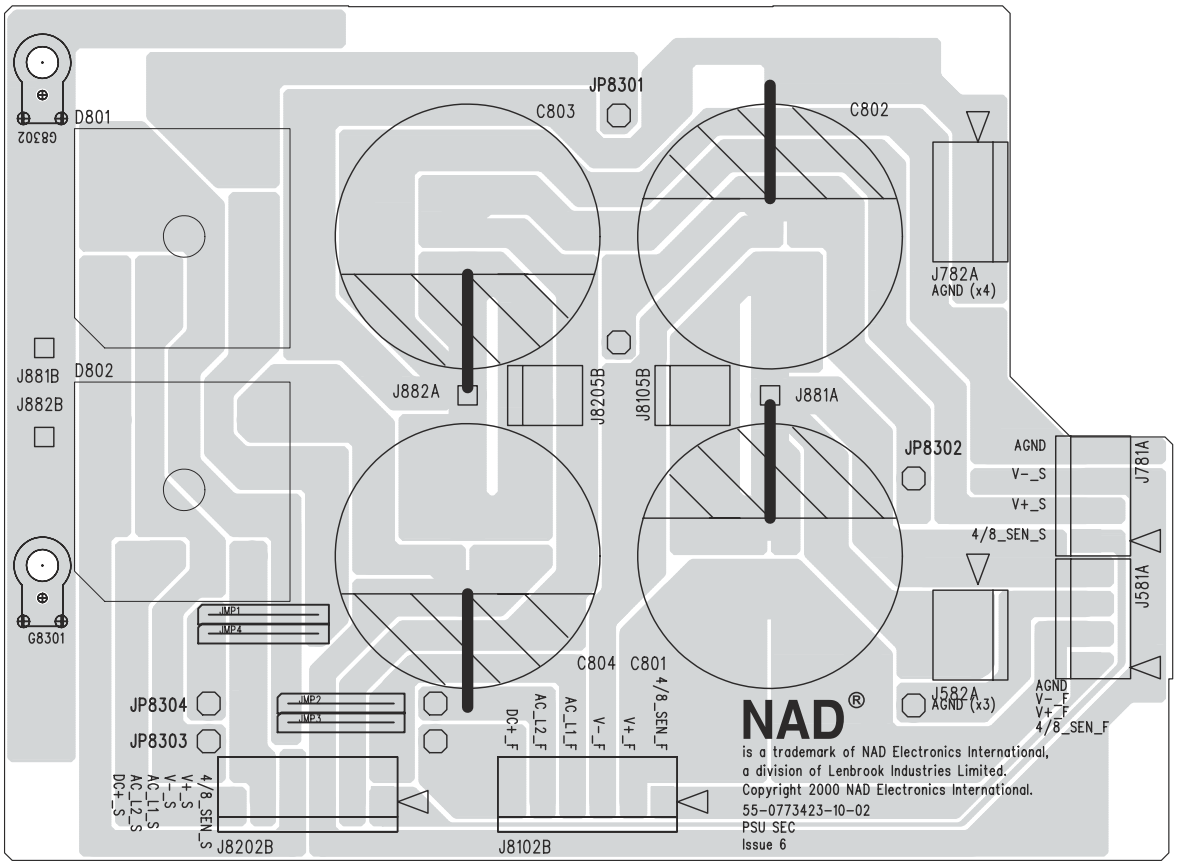
POWER SWITCH / VIDEO 6 BOARD



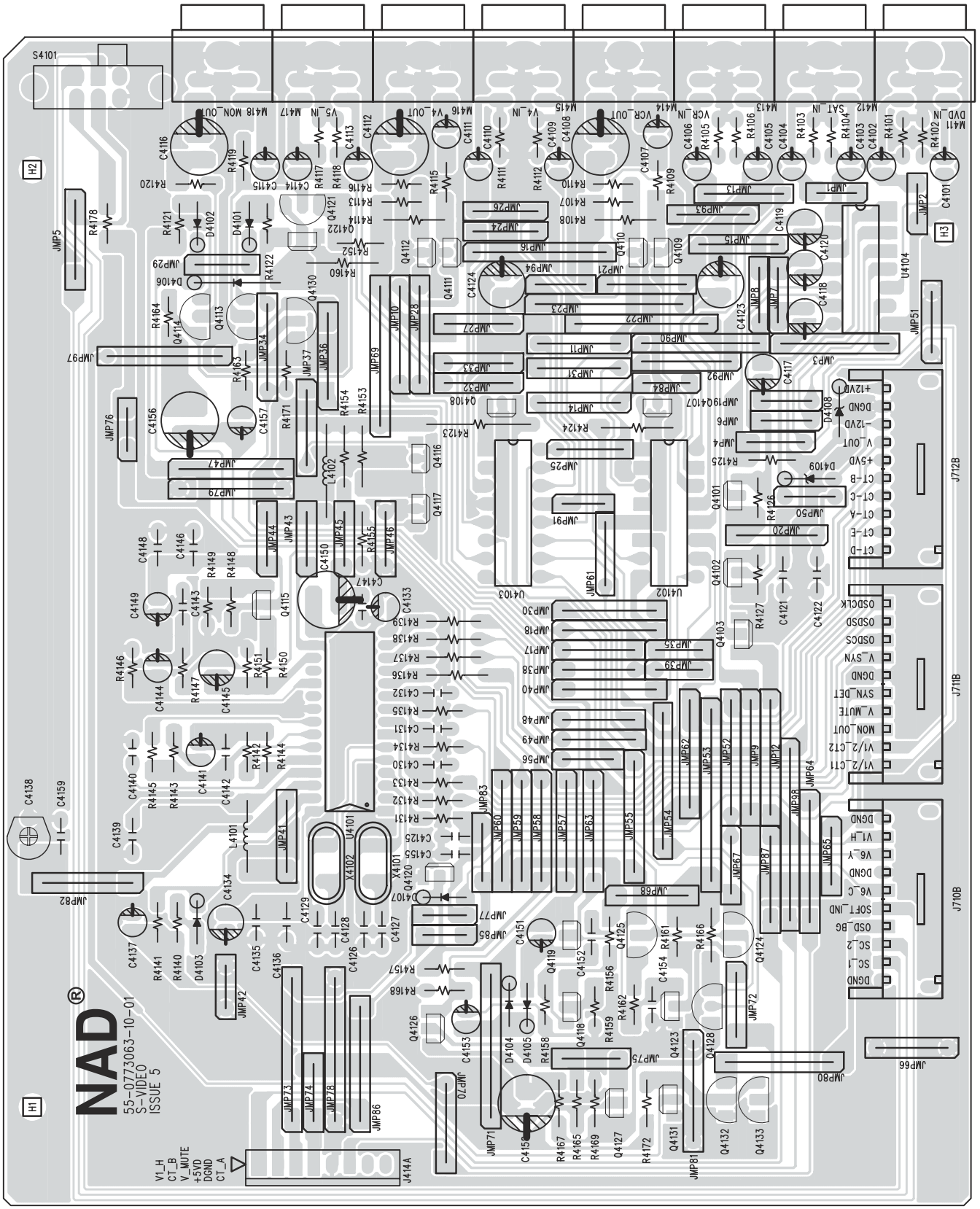
SPEAKER TERMINAL BOARD



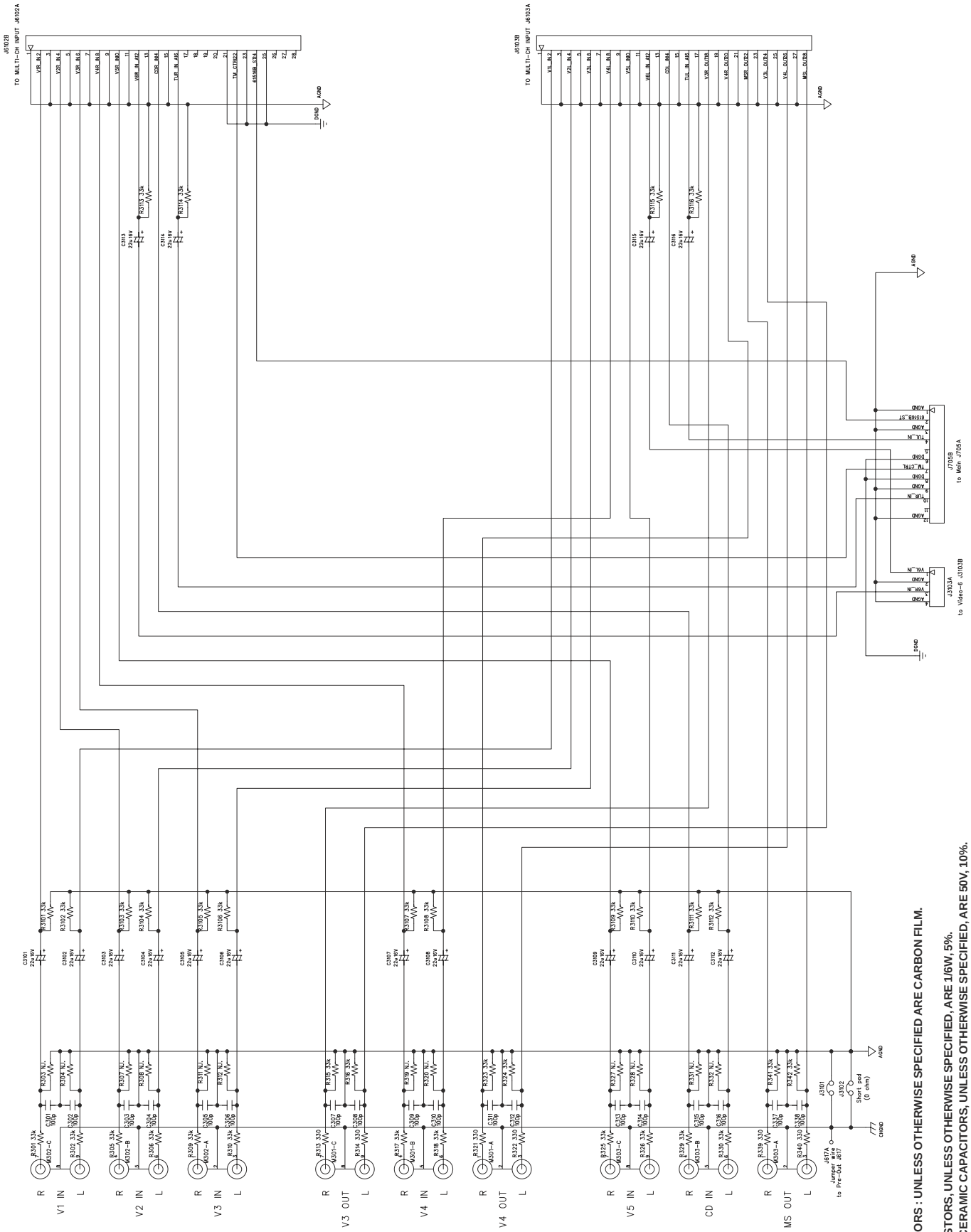
SECONDARY BOARD



S-VIDEO BOARD



SCHEMATIC DIAGRAM
AUDIO SWITCH



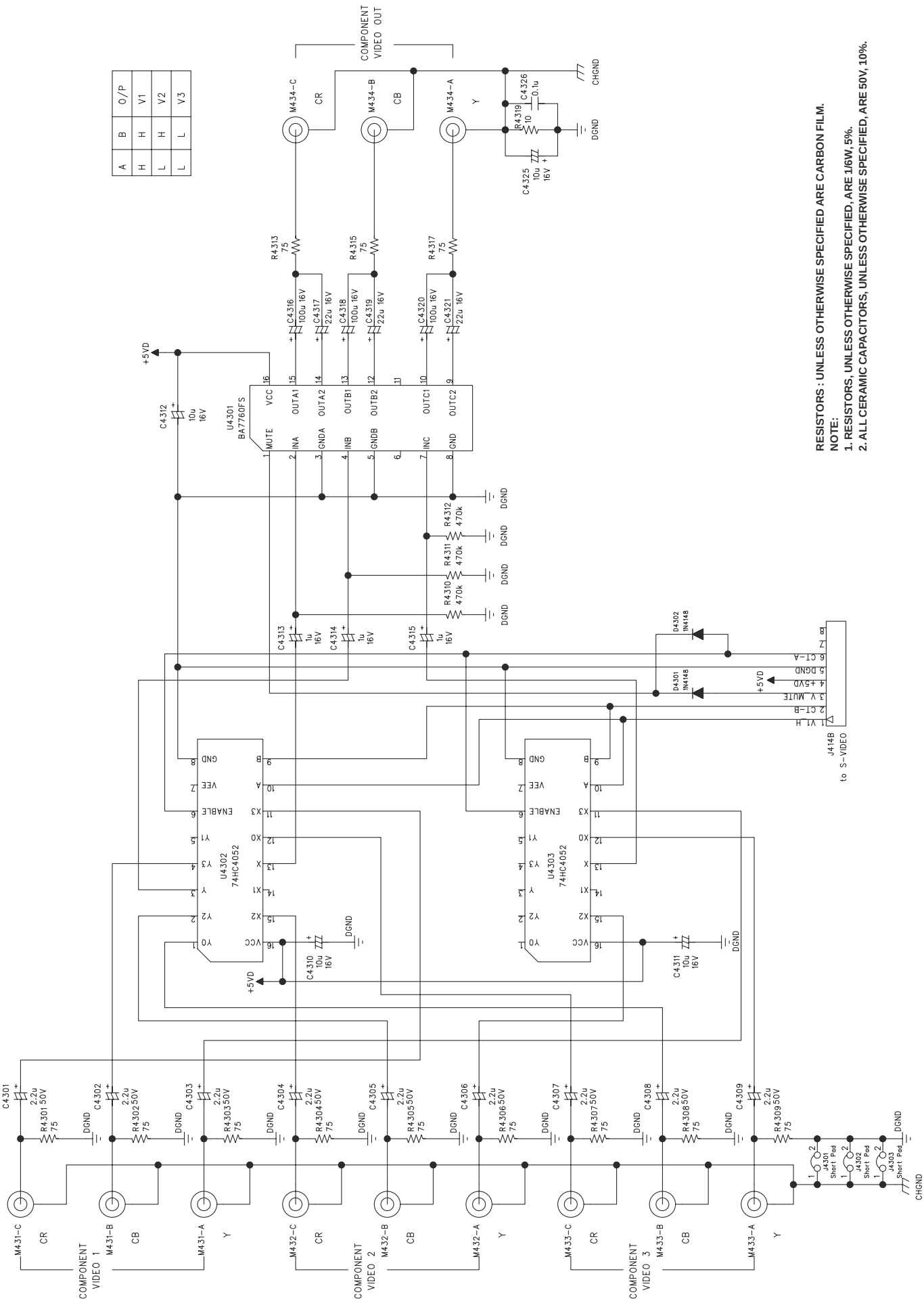
RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.

NOTE:

1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.

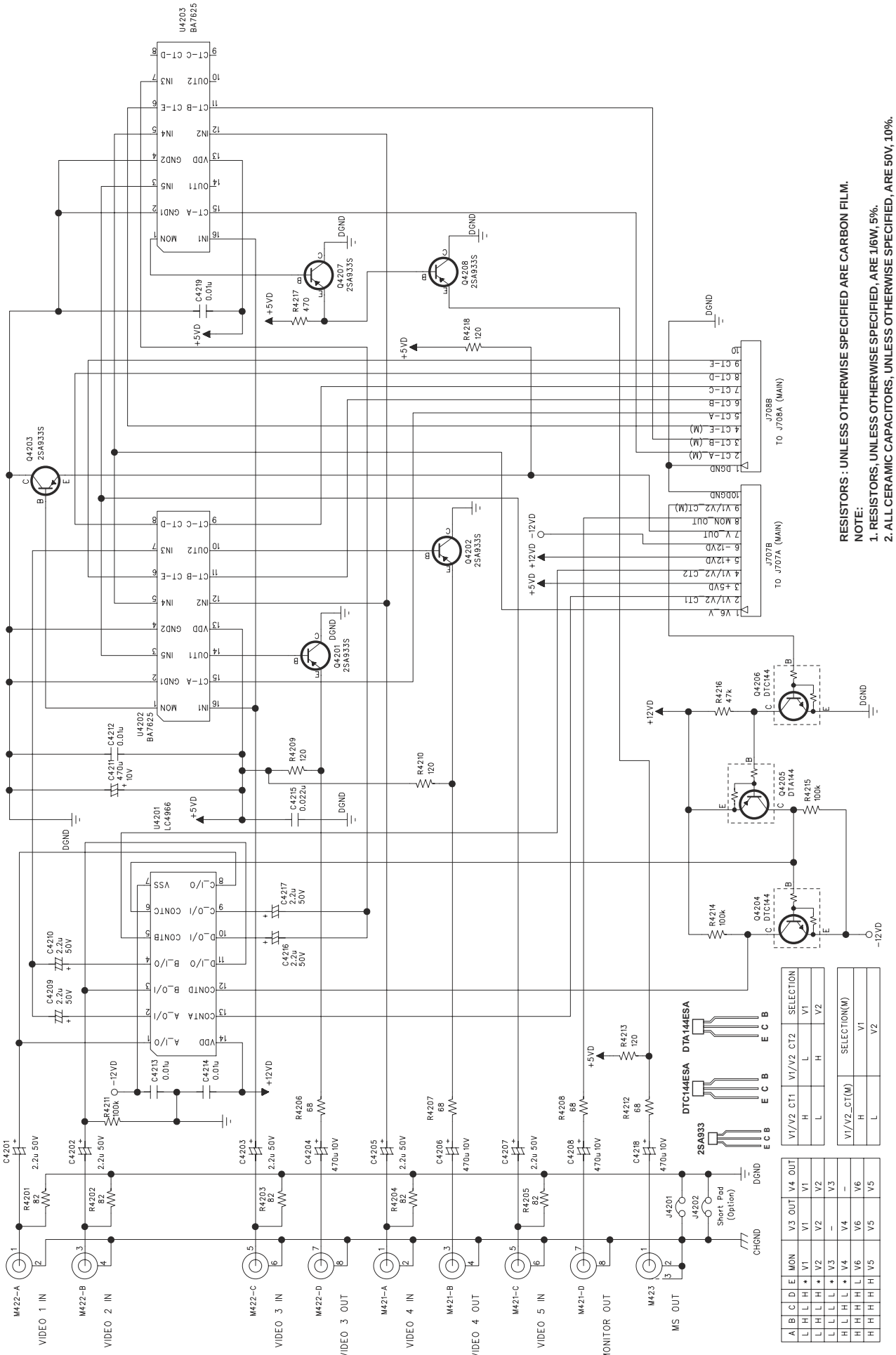
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

COMPONENT VIDEO

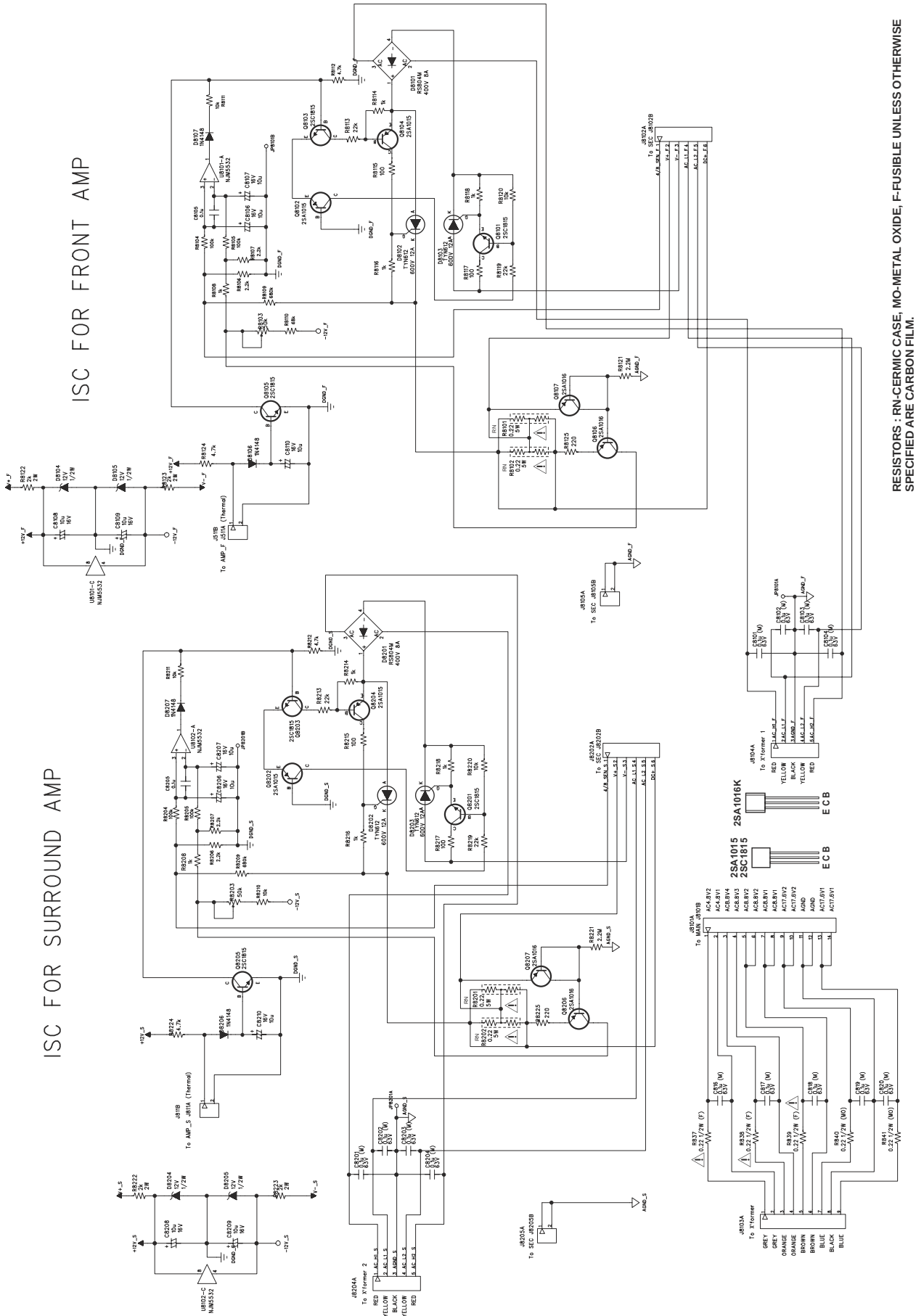


RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

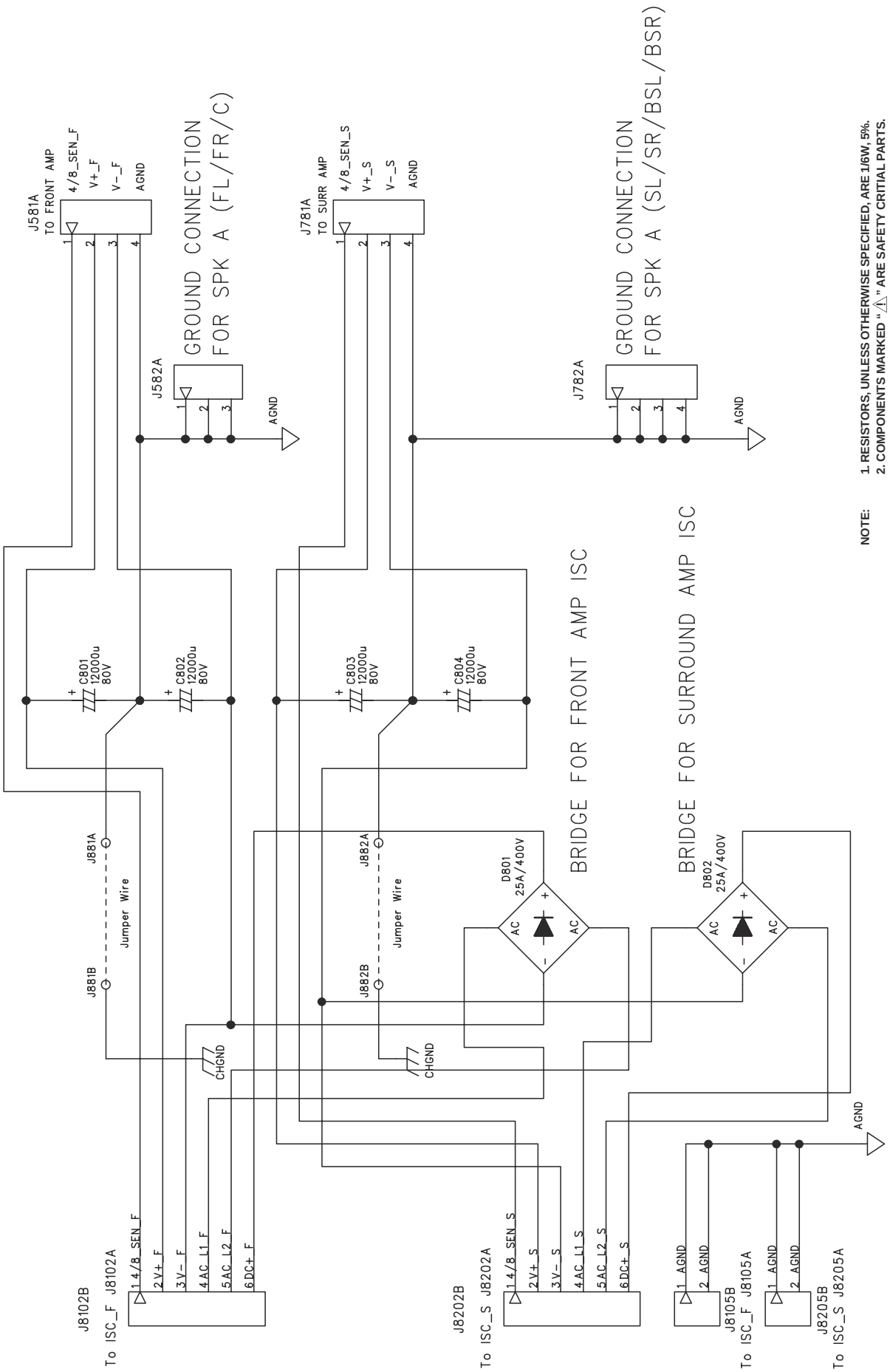
COMPOSITE VIDEO



ISC

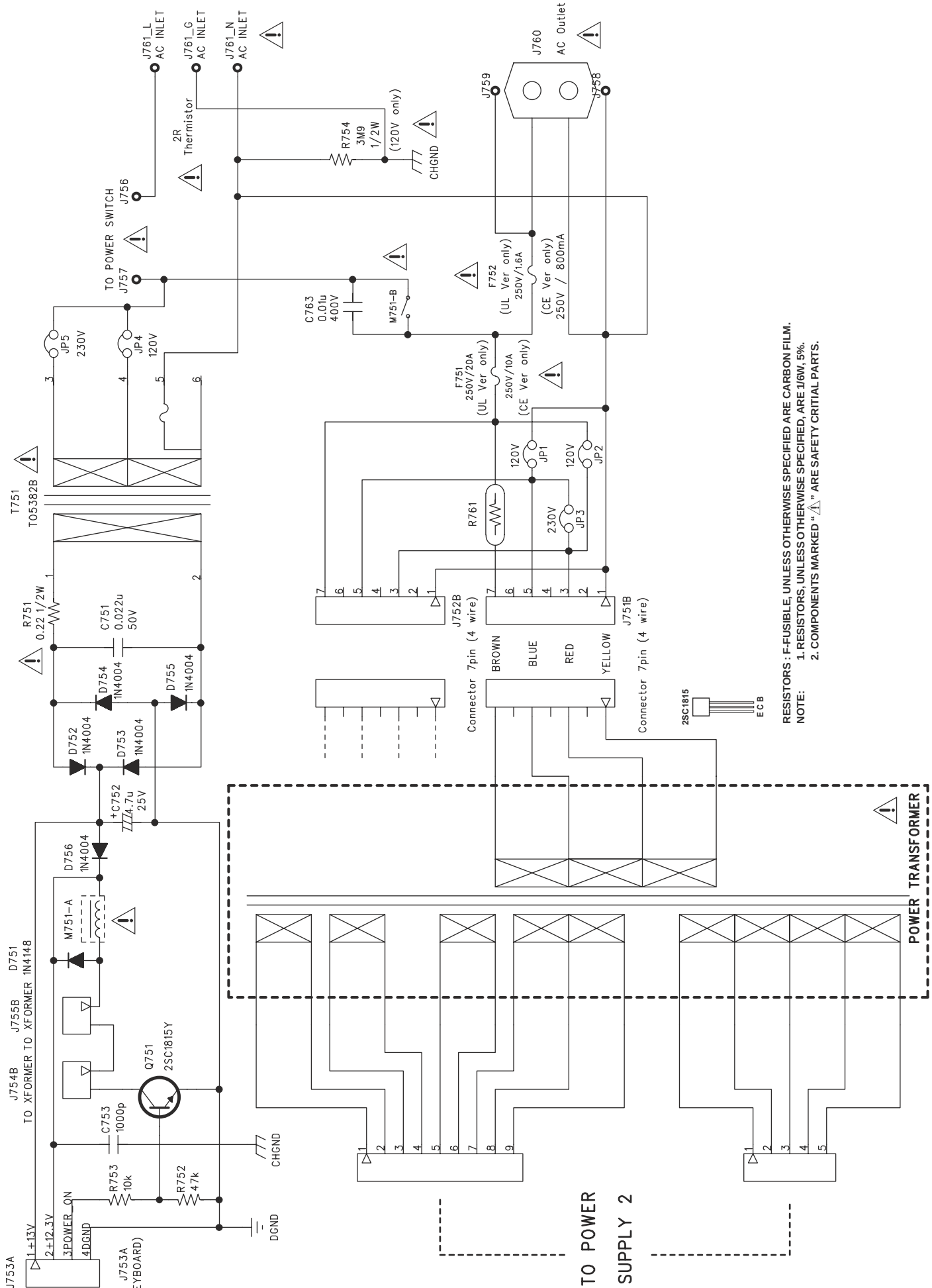

ISC FOR FRONT AMP
ISC FOR SURROUND AMP
2SA1016K
2SA1015
2SC1815
RESISTORS : RN-CERMIC CASE, MO-METAL OXIDE, F-FUSIBLE UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.
3. COMPONENTS MARKED "⚠" ARE SAFETY CRITIAL PARTS.

POWER SUPPLY (SECONDARY)

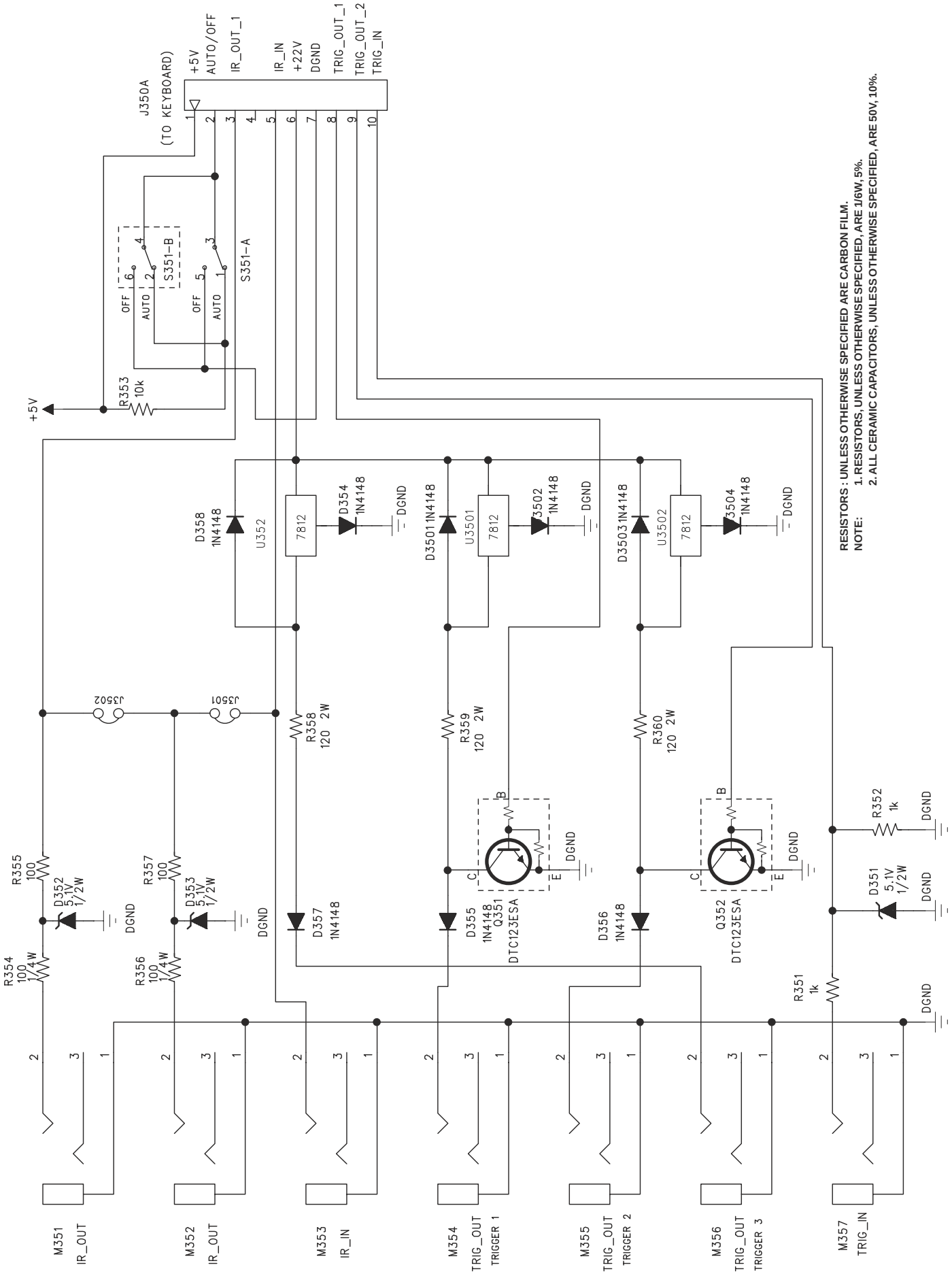


NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. COMPONENTS MARKED "⚠" ARE SAFETY CRITIAL PARTS.

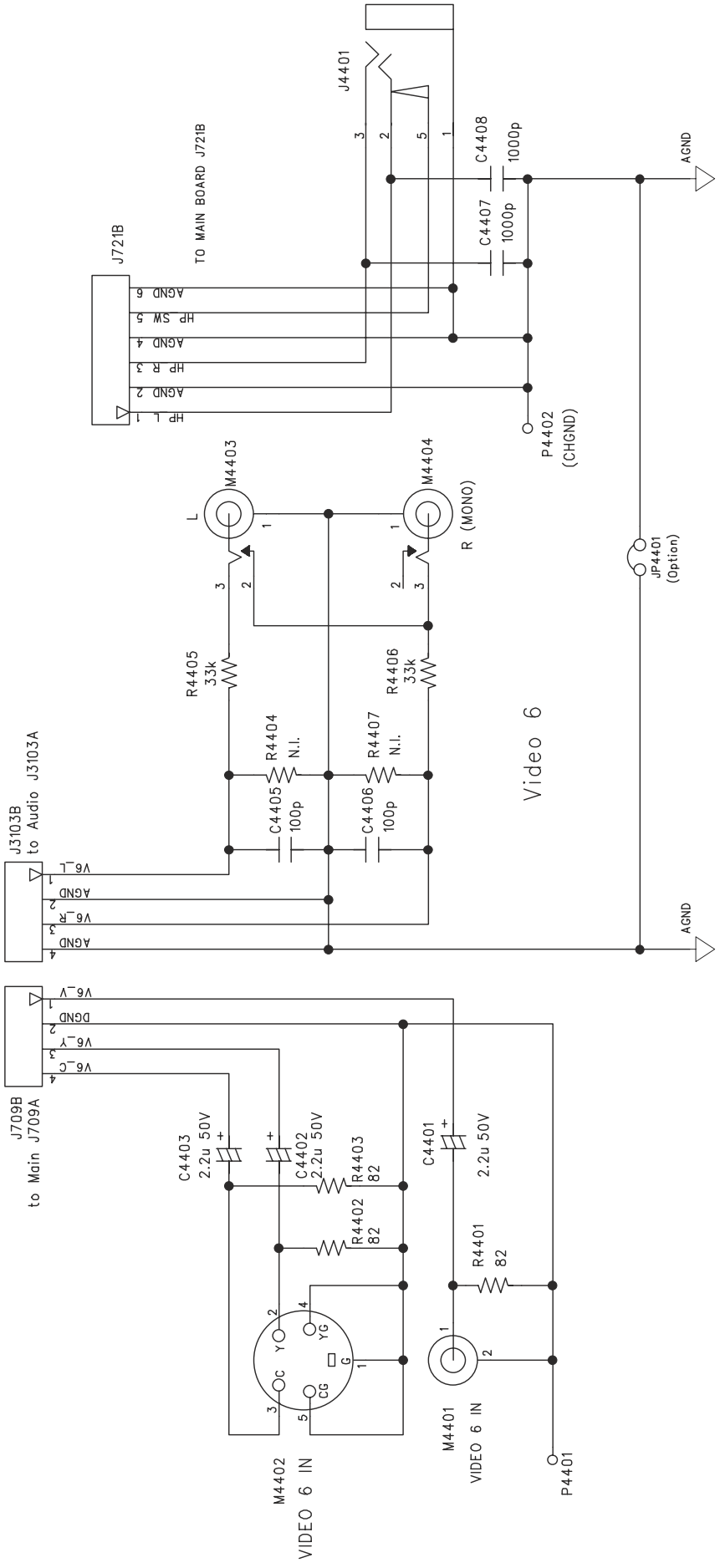
POWER SUPPLY (STAND BY)



TRIGGER

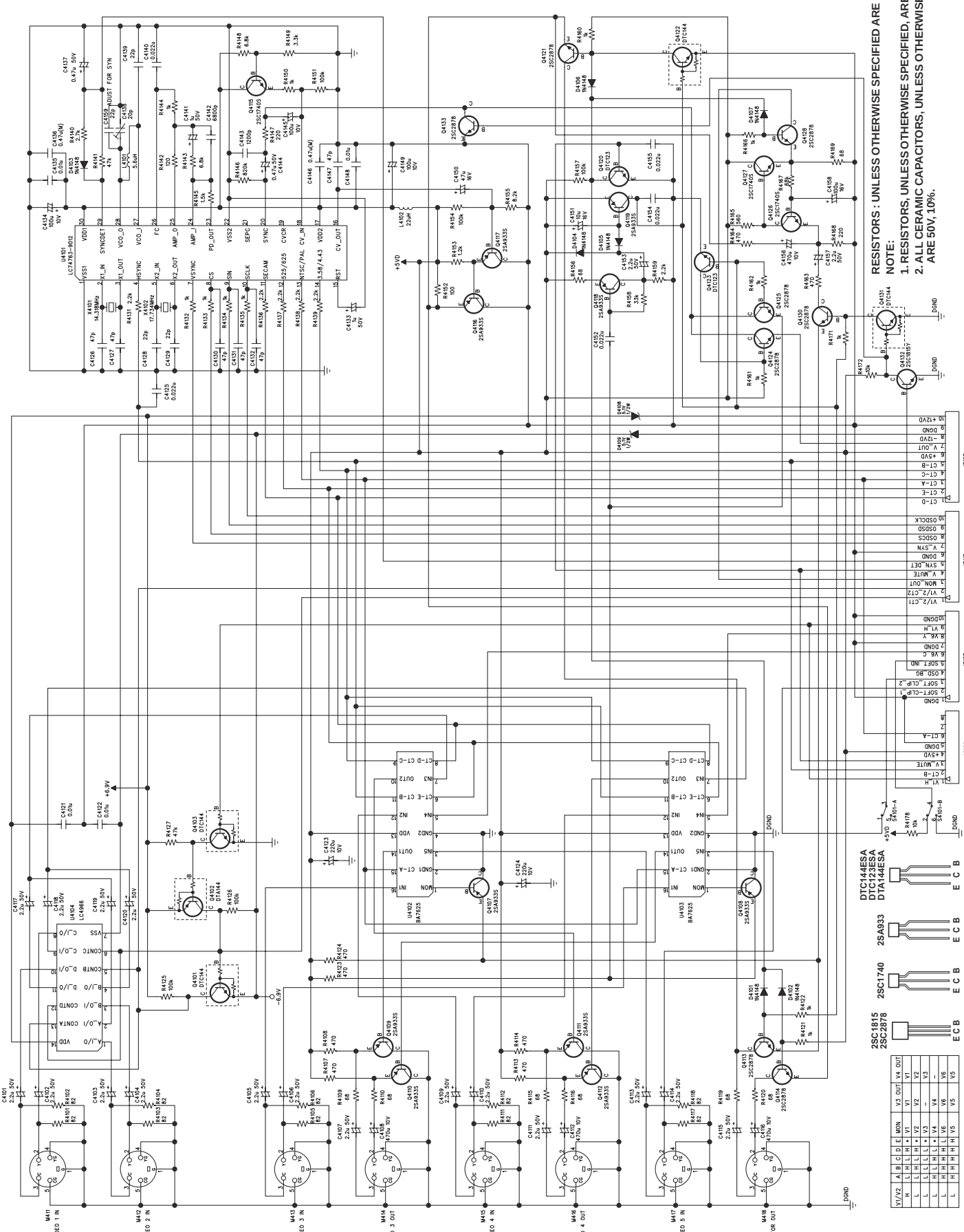

J350A
(TO KEYBOARD)
+5V
AUTO/OFF
IR_OUT_1
IR_IN
+22V
DGND
TRIG_OUT_1
TRIG_OUT_2
TRIG_IN
S351-B
S351-A
OFF
AUTO
R353 10k
+5V
D358 1N4148
U352
7812
D354 1N4148
D3501 1N4148
U3501
D3502 1N4148
D3503 1N4148
U3502
D3504 1N4148
DGND
J3502
J3501
R358 120 2W
R359 120 2W
R360 120 2W
R355 100 1/4W
R357 100
R354 100 1/4W
R356 100
D352 5.1V 1/2W
D353 5.1V 1/2W
D357 1N4148
D355 1N4148
Q351 DTC123ESA
D356 1N4148
Q352 DTC123ESA
R352 1k
D351 5.1V 1/2W
R351 1k
M351 IR_OUT
M352 IR_OUT
M353 IR_IN
M354 TRIG_OUT TRIGGER 1
M355 TRIG_OUT TRIGGER 2
M356 TRIG_OUT TRIGGER 3
M357 TRIG_IN
RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE: 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

VIDEO 6

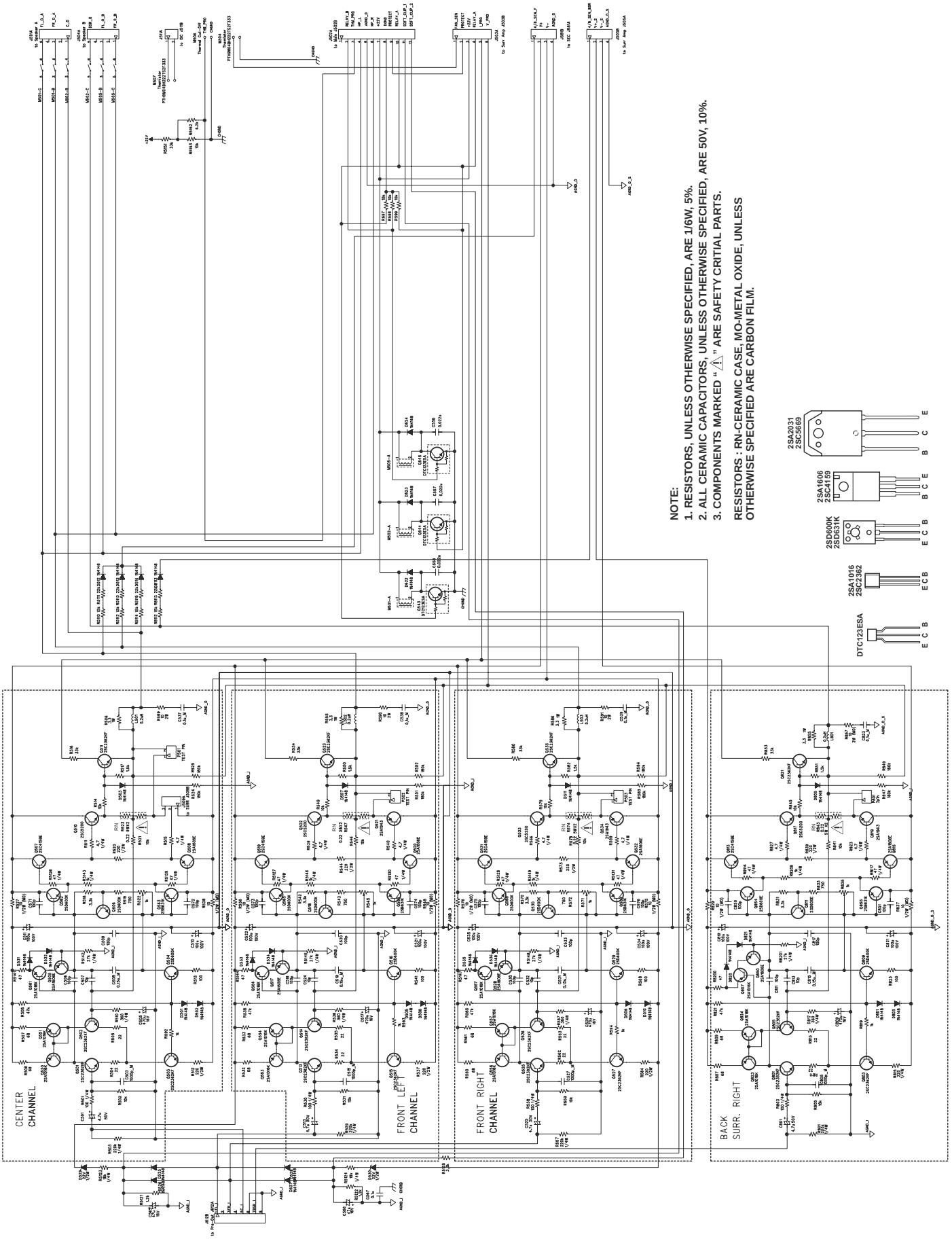


RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

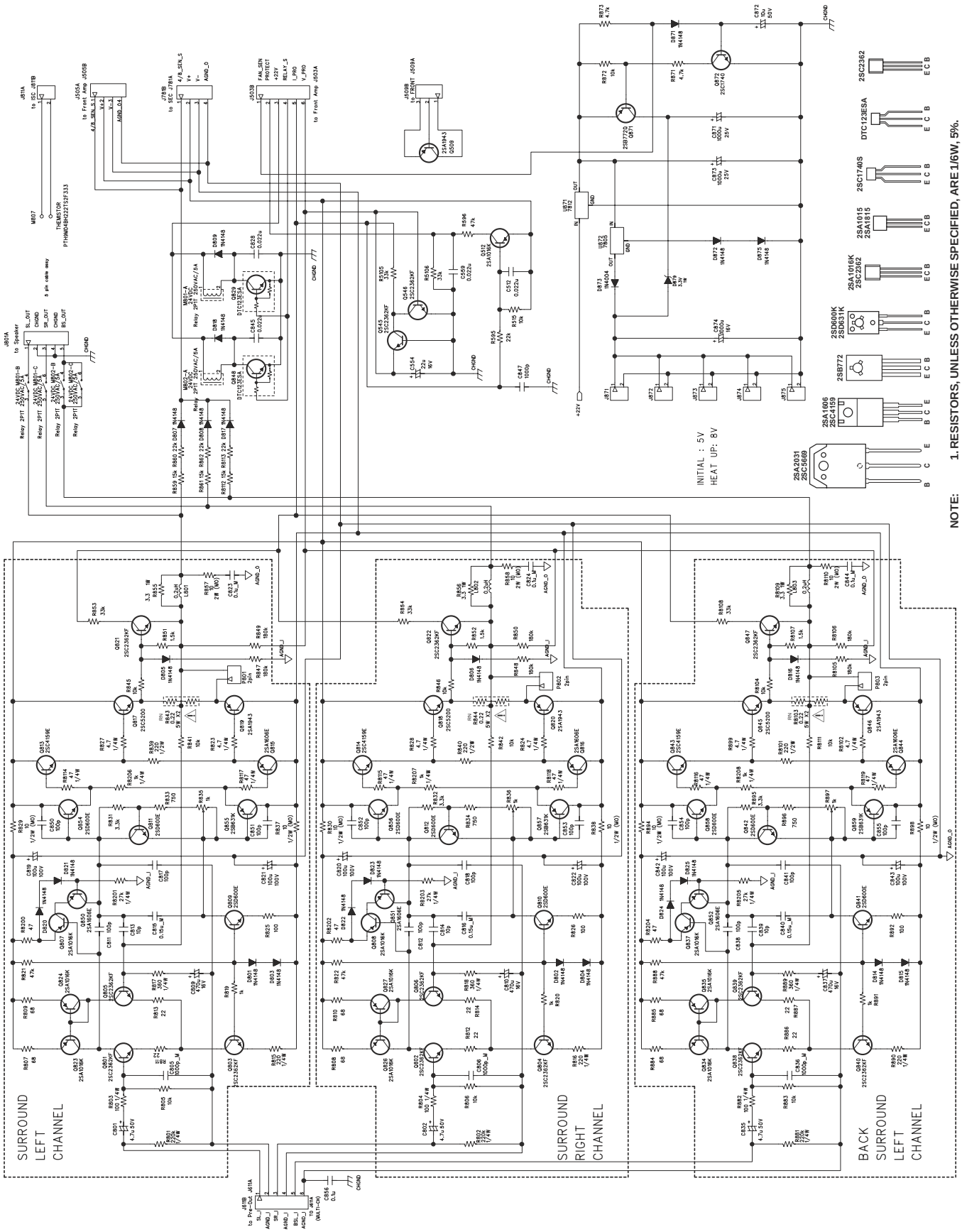
S-VIDEO


RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.
DTC144ESA
DTC123ESA
DTA144ESA
2SA933
2SC1740
2SC1815
2SC2878
VIDEO 1 IN
VIDEO 2 IN
VIDEO 3 IN
VIDEO 3 OUT
VIDEO 4 IN
VIDEO 4 OUT
VIDEO 5 IN
MONITOR OUT
TO J712A (MAIN)
TO J711A (MAIN)
TO J710A (MAIN)
TO J414B (COMPONENT VIDEO)

FRONT / CENTER / BACK SURROUND RIGHT AMPLIFIER



SURROUND / BACK SURROUND LEFT AMPLIFIER

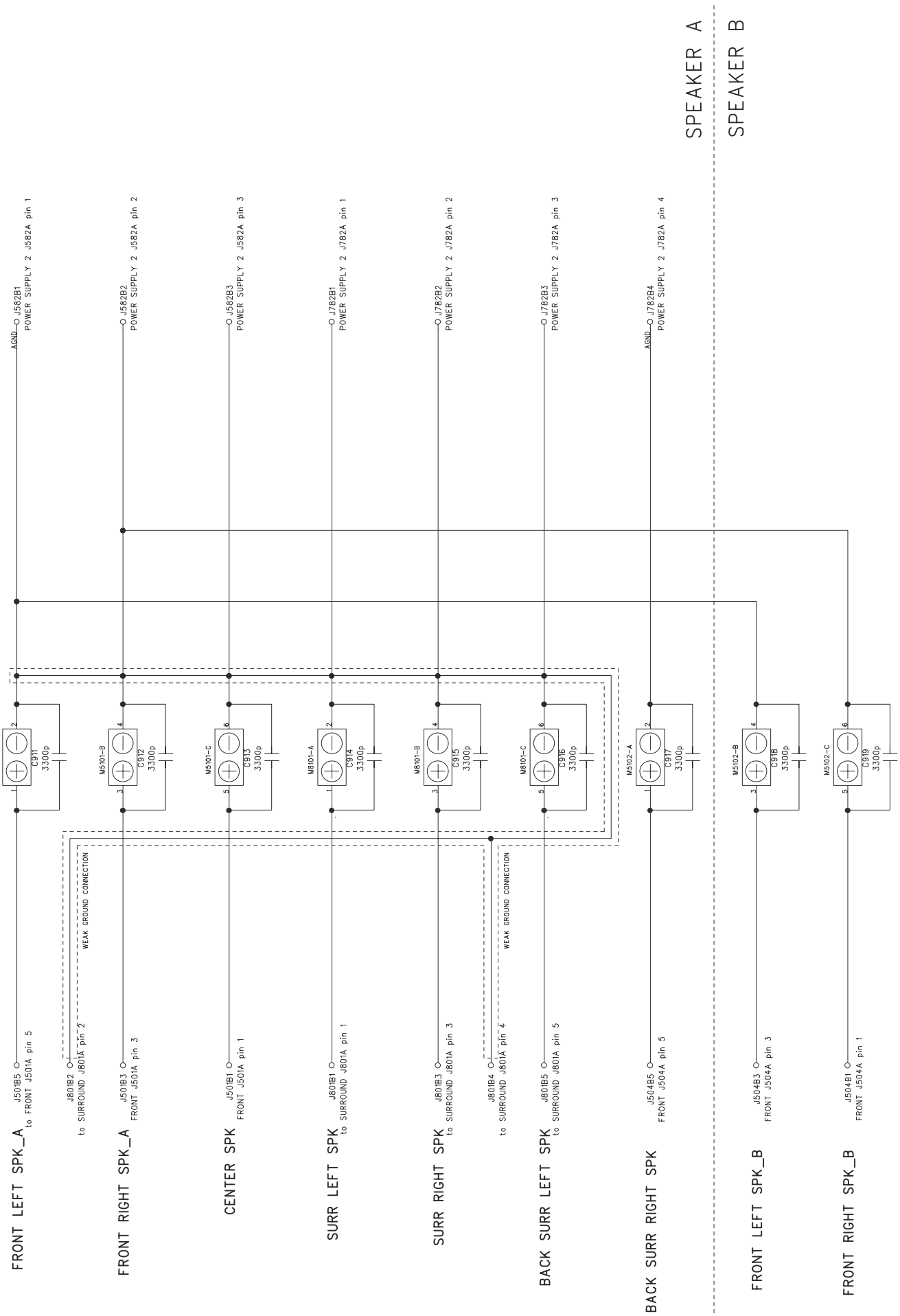


NOTE:

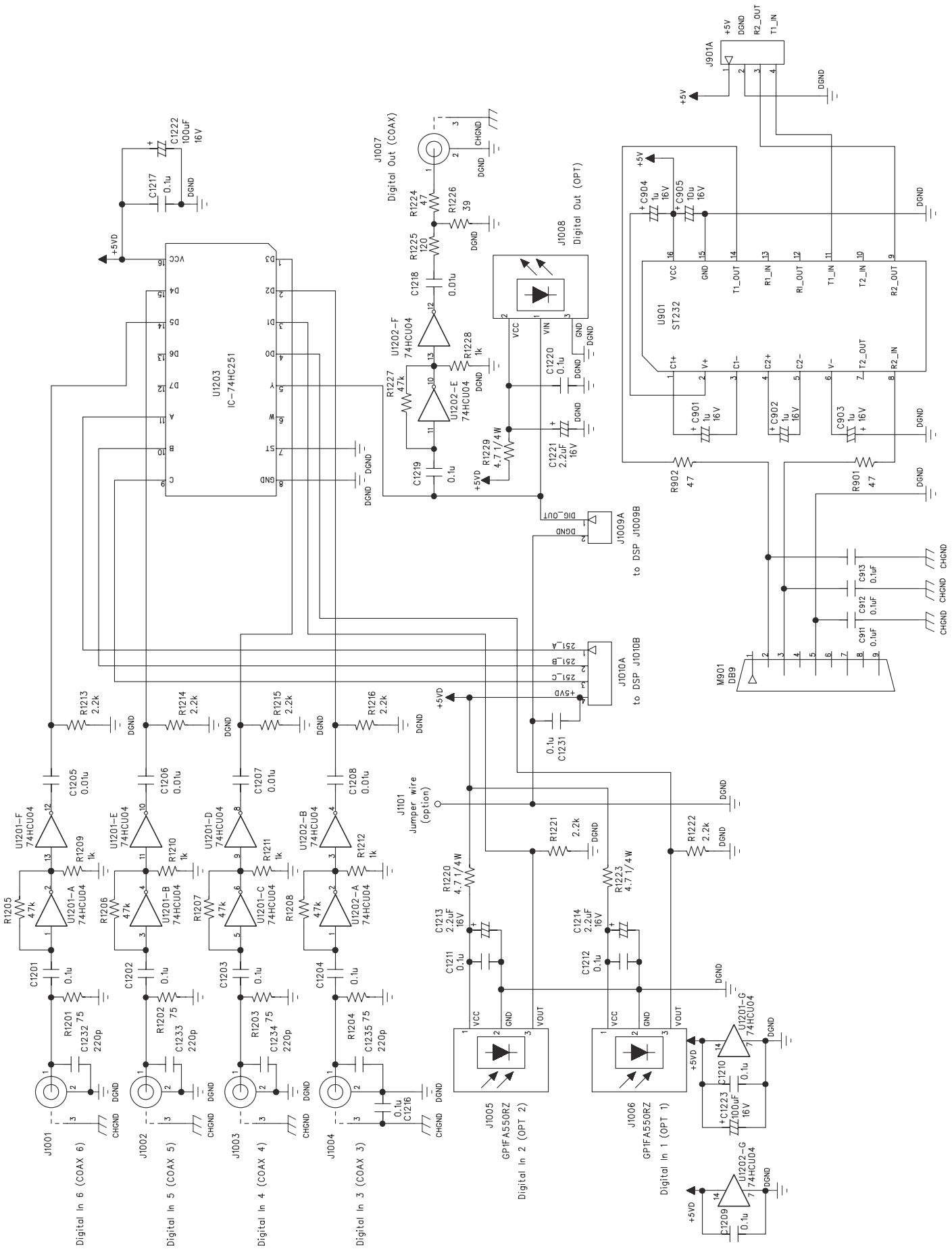
1. **RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.**
2. **ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.**
3. **COMPONENTS MARKED "⚠" ARE SAFETY CRITIAL PARTS.**

RESISTORS : RN-CERAMIC CASE, MO-METAL OXIDE, UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.

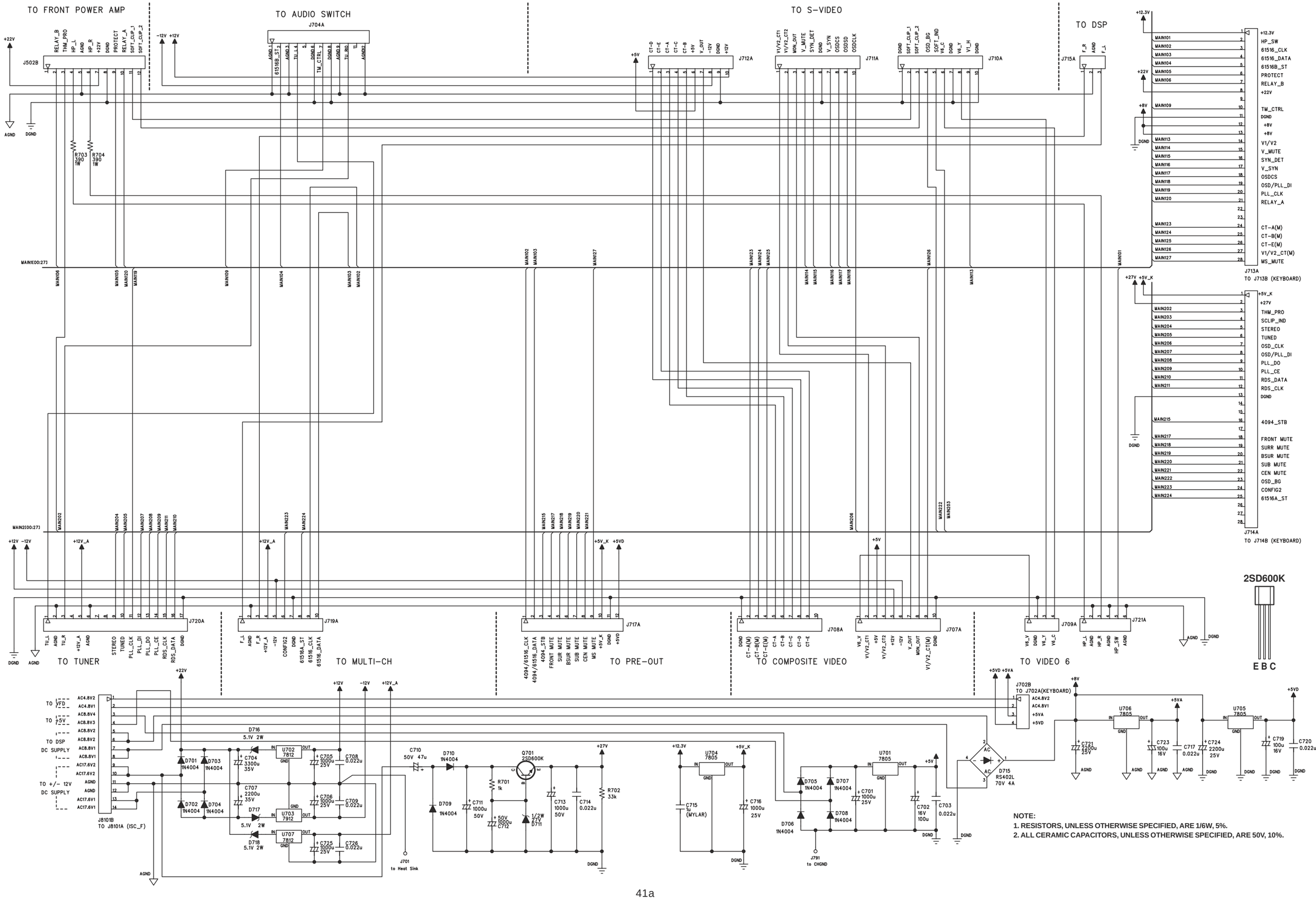
SPEAKER A & B


SPEAKER A
SPEAKER B
FRONT LEFT SPK_A
to FRONT J501A pin 5
J501B5
FRONT RIGHT SPK_A
J501B3
FRONT J501A pin 3
CENTER SPK
J501B1
FRONT J501A pin 1
SURR LEFT SPK
to SURROUND J801A pin 1
J801B1
SURR RIGHT SPK
to SURROUND J801A pin 3
J801B3
BACK SURR LEFT SPK
to SURROUND J801A pin 5
J801B5
BACK SURR RIGHT SPK
J504B5
FRONT J504A pin 5
FRONT LEFT SPK_B
J504B3
FRONT J504A pin 3
FRONT RIGHT SPK_B
J504B1
FRONT J504A pin 1
to SURROUND J801A pin 2
J801B2
to SURROUND J801A pin 4
J801B4
WEAK GROUND CONNECTION
WEAK GROUND CONNECTION
AGND
J582B1
POWER SUPPLY 2 J582A pin 1
J582B2
POWER SUPPLY 2 J582A pin 2
J582B3
POWER SUPPLY 2 J582A pin 3
J782B1
POWER SUPPLY 2 J782A pin 1
J782B2
POWER SUPPLY 2 J782A pin 2
J782B3
POWER SUPPLY 2 J782A pin 3
AGND
J782B4
POWER SUPPLY 2 J782A pin 4
M5101-A
M5101-B
M5101-C
M8101-A
M8101-B
M8101-C
M5102-A
M5102-B
M5102-C
C911
C912
C913
C914
C915
C916
C917
C918
C919
3300p

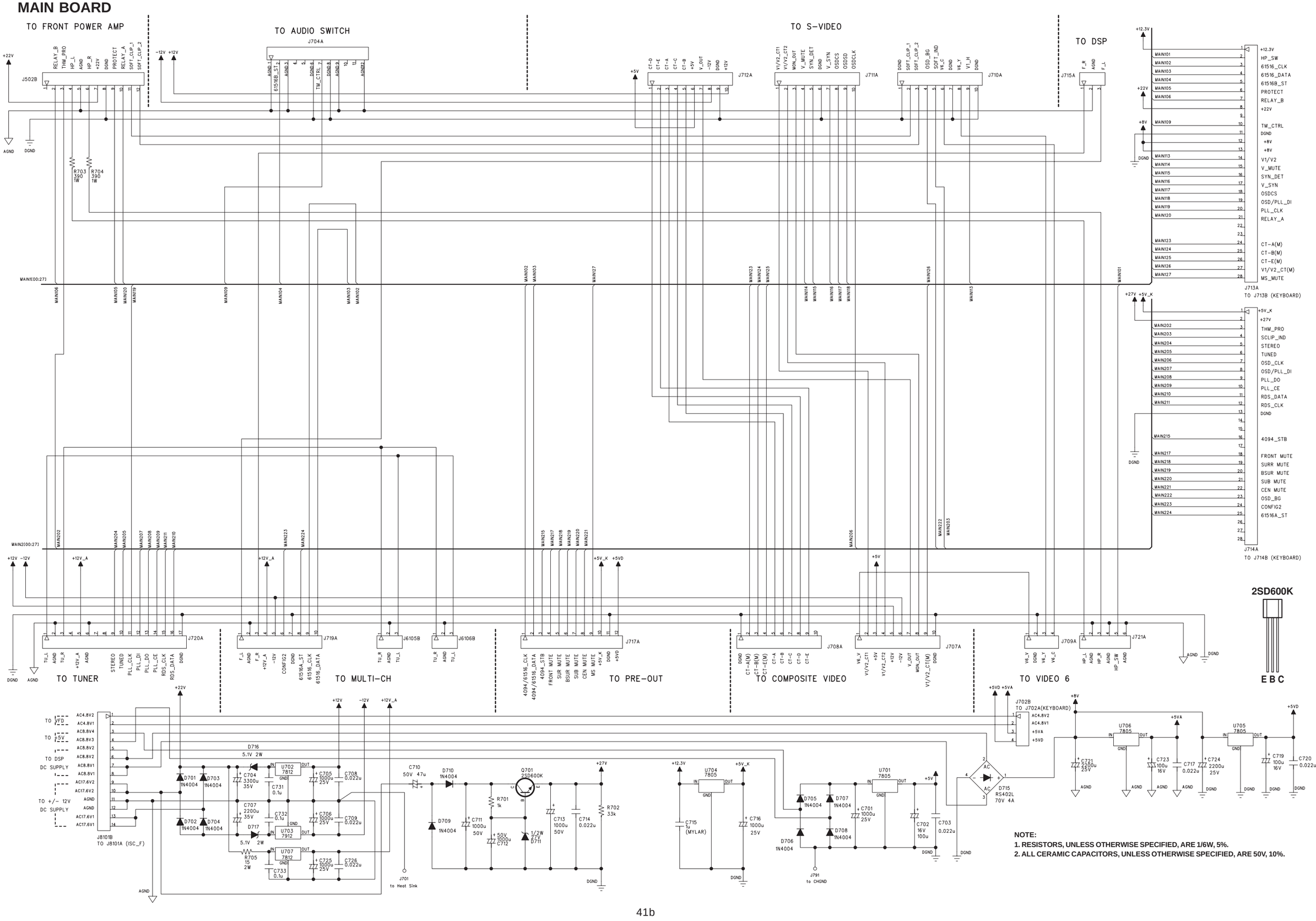
DIGITAL IN & OUT



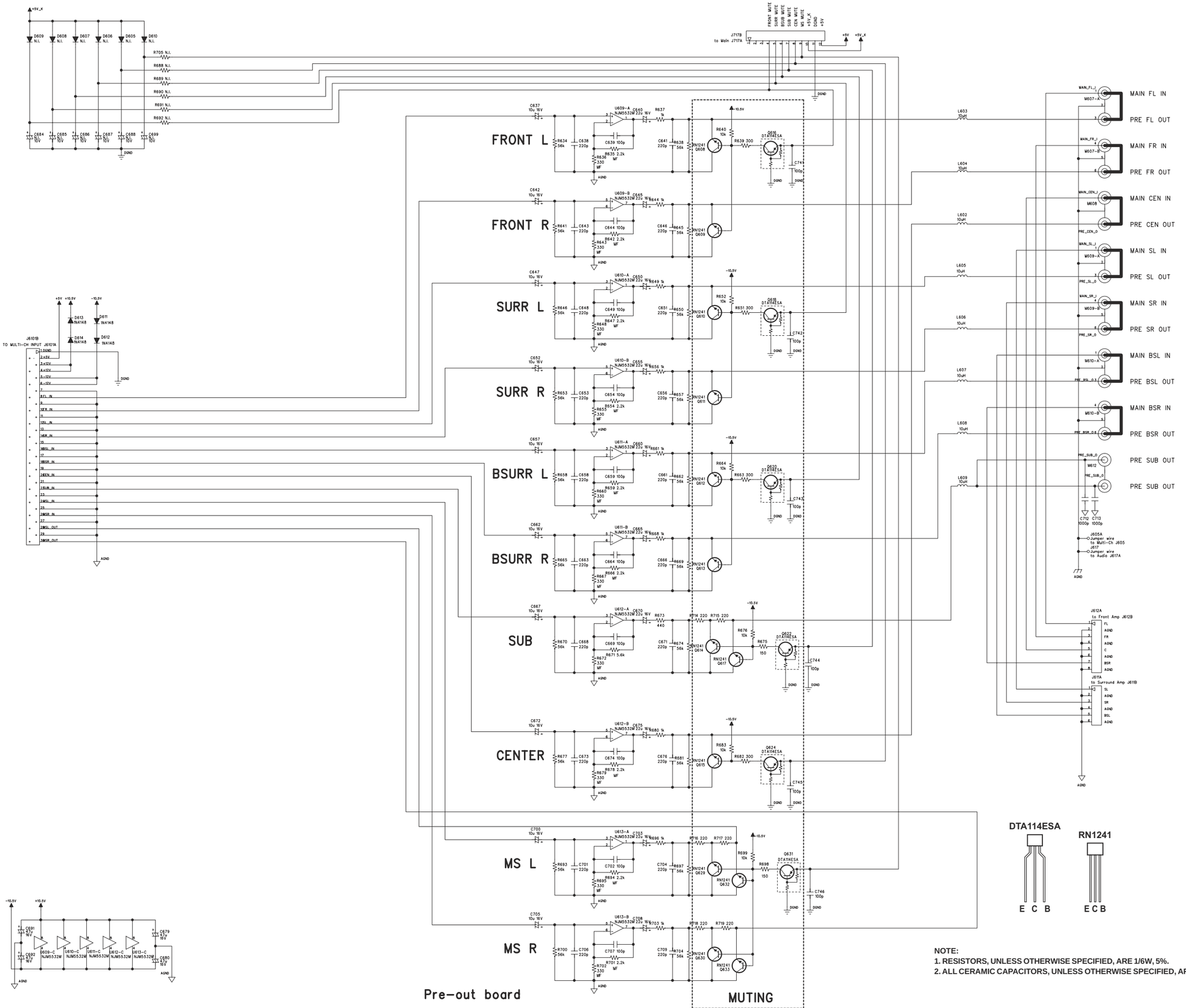
MAIN BOARD


TO FRONT POWER AMP
TO AUDIO SWITCH
TO S-VIDEO
TO DSP
J502B
J704A
J712A
J711A
J710A
J715A
J713A
TO J713B (KEYBOARD)
J714A
TO J714B (KEYBOARD)
MAIN1[00:27]
MAIN2[00:27]
R703 390 1W
R704 390 1W
TO TUNER
TO MULTI-CH
TO PRE-OUT
TO COMPOSITE VIDEO
TO VIDEO 6
2SD600K
E B C
TO VFD
TO +5V
TO DSP DC SUPPLY
TO +/- 12V DC SUPPLY
J8101B
TO J8101A (ISC_F)
J702B
TO J702A(KEYBOARD)
D715 RS402L 70V 4A
J701 to Heat Sink
J791 to CHGND
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

MAIN BOARD


TO FRONT POWER AMP
TO AUDIO SWITCH
TO S-VIDEO
TO DSP
TO TUNER
TO MULTI-CH
TO PRE-OUT
TO COMPOSITE VIDEO
TO VIDEO 6
J502B
J704A
J712A
J711A
J710A
J715A
J720A
J719A
J6105B
J6106B
J717A
J708A
J707A
J709A
J721A
J713A
TO J713B (KEYBOARD)
J714A
TO J714B (KEYBOARD)
J702B
TO J702A(KEYBOARD)
J8101B
TO J8101A (ISC_F)
J701
to Heat Sink
J791
to CHGND
MAIN100:27
MAIN2[00:27]
R703 390 1W
R704 390 1W
R705 15 2W
D716 5.1V 2W
5.1V 2W
Q701 2SD600K
2SD600K
E B C
D715 RS402L 70V 4A
+22V
-12V +12V
+5V
+12V -12V
+12V_A
+5V_K +5VD
+5VD +5VA
+12.3V
+27V +5V_K
+8V
AGND
DGND
TO VFD
TO +5V
TO DSP DC SUPPLY
TO +/- 12V DC SUPPLY
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

PRE-OUT



NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

DSP

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

U1001
CS49326-CL

U1004 74HC157

U1002 74LVC245A

U1003 74LVC245A

U1005 CS8415A

U1025 CS4392

U1026 CS4360

U1027 CS5333

U1008 74LVC574

U1009 74LVC574

U1014 74LVC245A

U1007 W27C020-70/W27E040-90 (256k x 8)/(512k x 8)

U1029 IC-HCF4094B

X1001 12.288MHz Crystal Oscillator

U1010-A NJM5532M

U1028-A NJM5532M

U1028-B NJM5532M

U1011-A NJM5532M

U1011-B NJM5532M

U1012-A NJM5532M

U1012-B NJM5532M

U1013-A NJM5532M

U1013-B NJM5532M

U1023-A NJM5532M

U1023-B NJM5532M

U1015 LM317

U1020 LM317

2SC1815

E C B

J1009B TO J1009A (DIGITAL IN)

J1010B TO J1010A (DIGITAL IN)

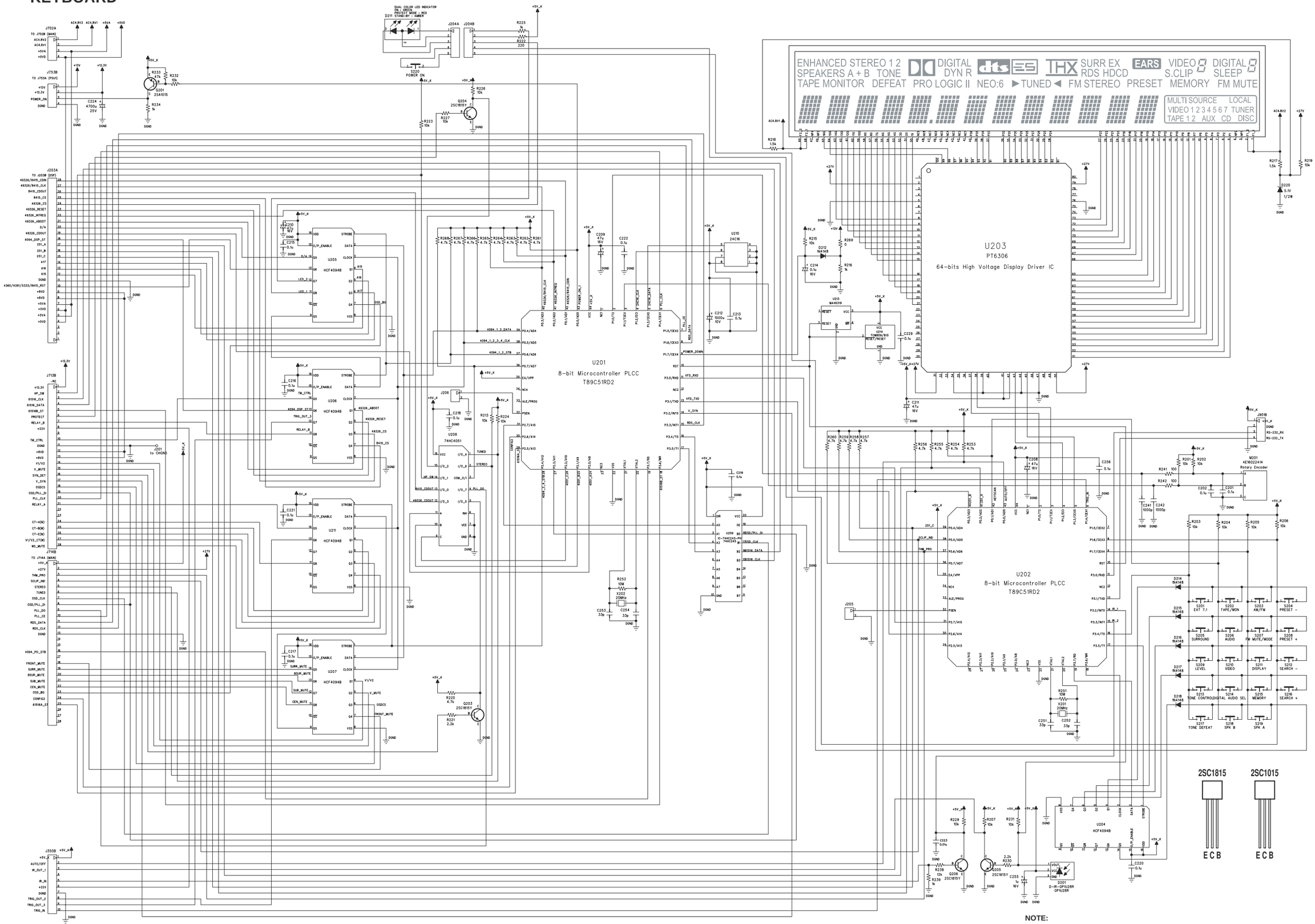
J203B TO J203A (KEYBOARD)

J715B TO J715A (MAINBOARD)

J604B TO J604A (MULTI-CH)

NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

KEYBOARD



NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 5%.

MULTI-CH

EXT FL IN
EXT FR IN
EXT SL IN
EXT SR IN
EXT BSL IN
EXT BSR IN
EXT CEN IN
EXT SUB IN
TAPE L IN
TAPE R IN
TAPE L OUT
TAPE R OUT
DISC_L IN
DISC R IN

SS8050
SS8550
E B C

DTC144ESA
DTA144ESA
E C B

2SC2878
E C B

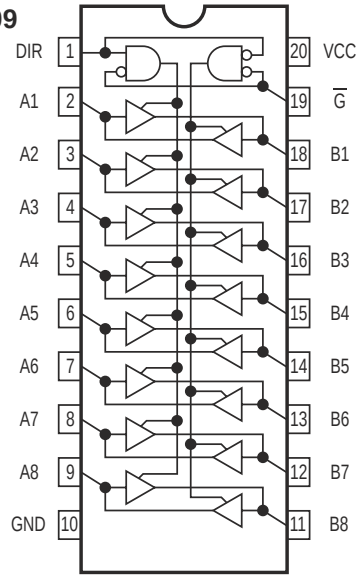
RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

+7.5V SUPPLY
−7.5V SUPPLY

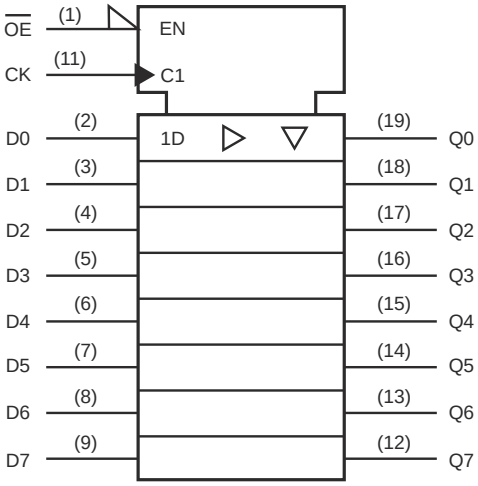
IC BLOCK DIAGRAM

74LVC245
DSP BOARD: U1002, U1003, U1014

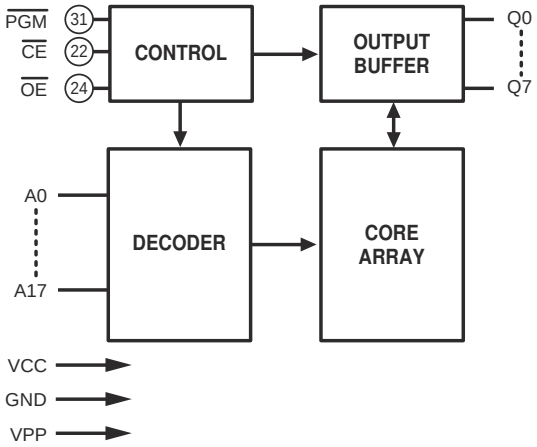
74VHC245
KEYBOARD: U209



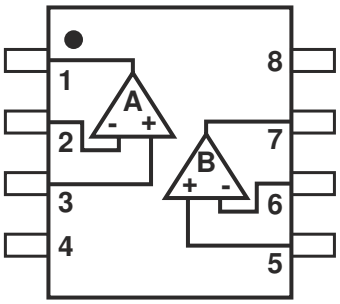
74LVQ574
DSP BOARD: U1008, U1009



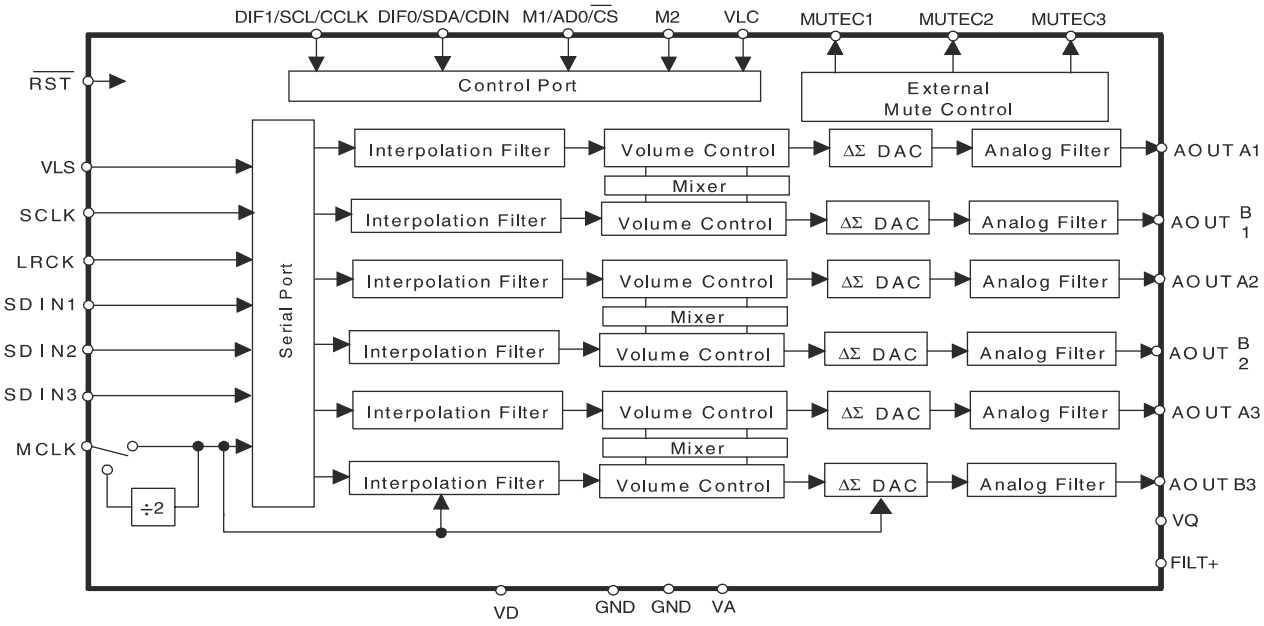
W27C020
DSP BOARD: U1007



NJM5532
DSP BOARD: U1010~U1013, U1023 & U1028
MULTI-CHANNEL: U6104~U6107
PRE-OUT BOARD: U609~U613
ISC FRONT BOARD: U8101
ISC SURROUND BOARD: U8102

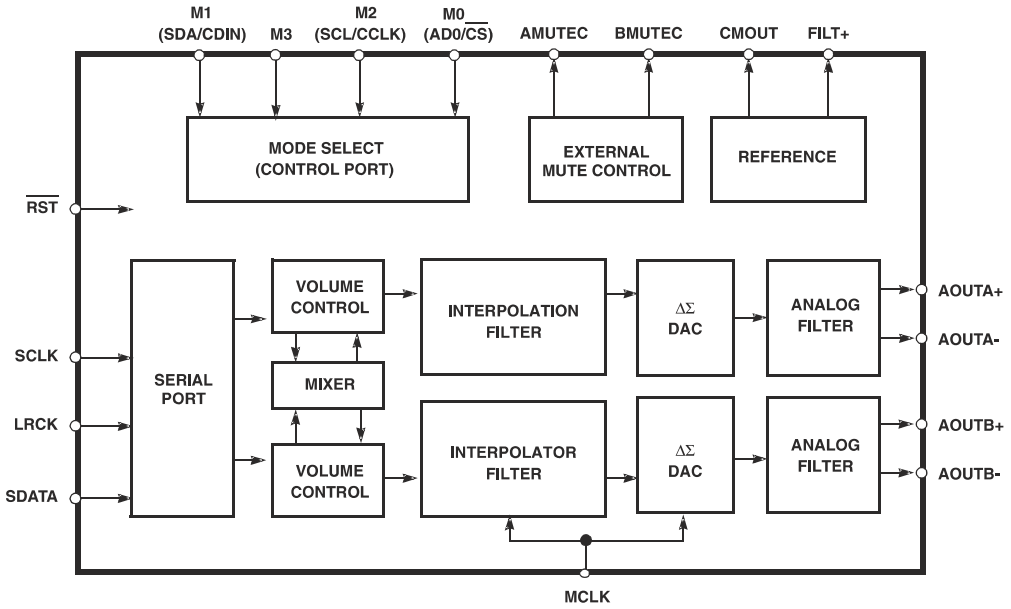


CS4360KZ
DSP BOARD: U1026



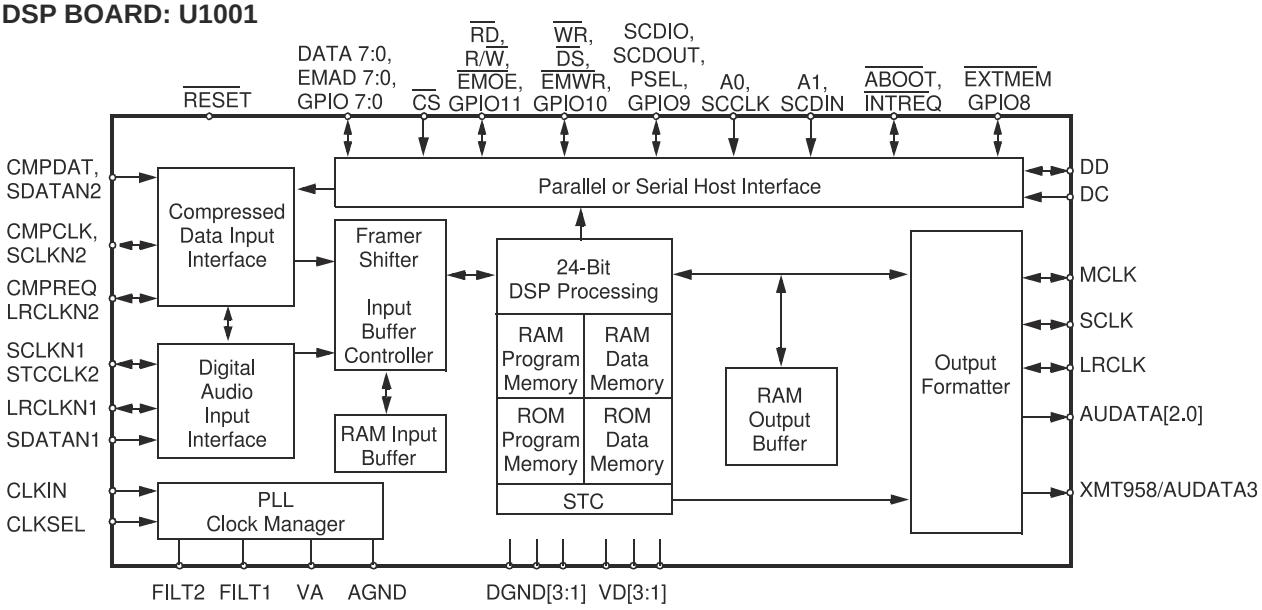
CS4392

DSP BOARD: U1025



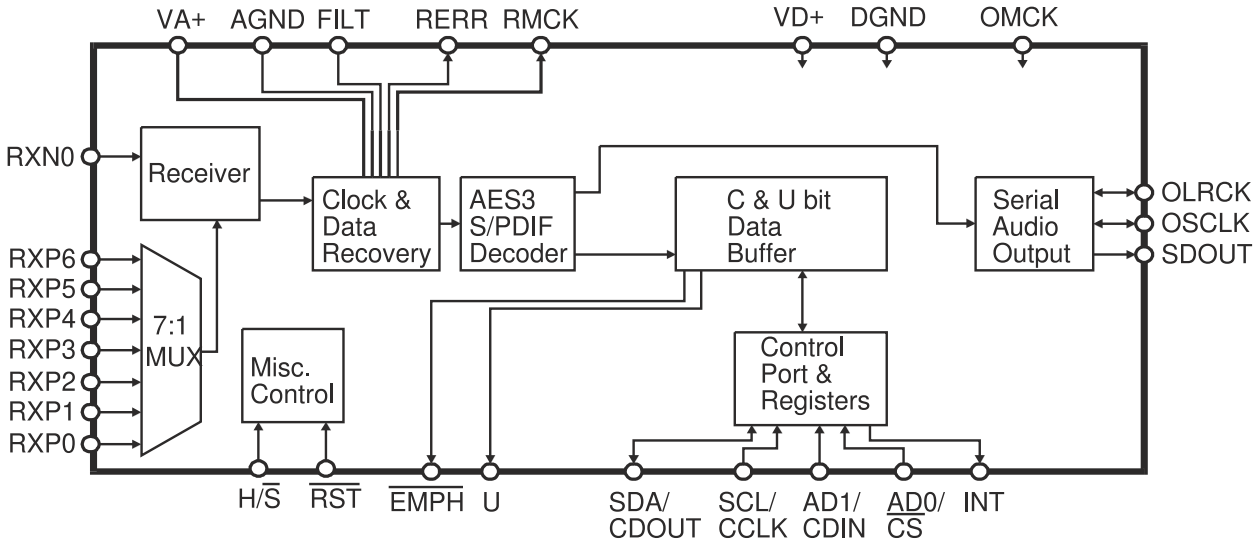
CS49326

DSP BOARD: U1001

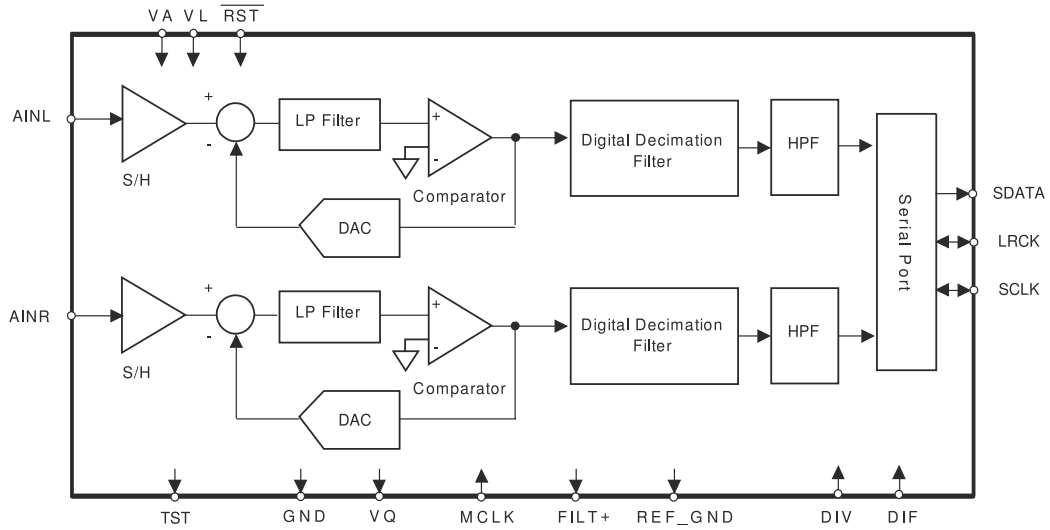


CS8415A

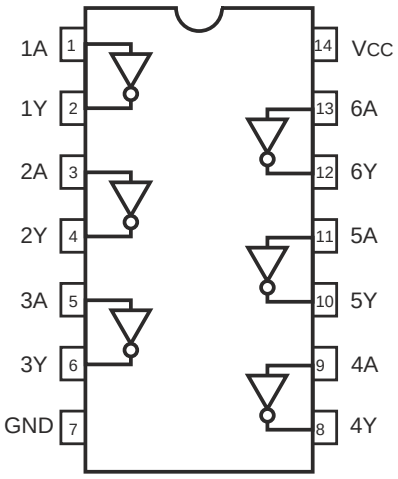
DSP BOARD: U1005



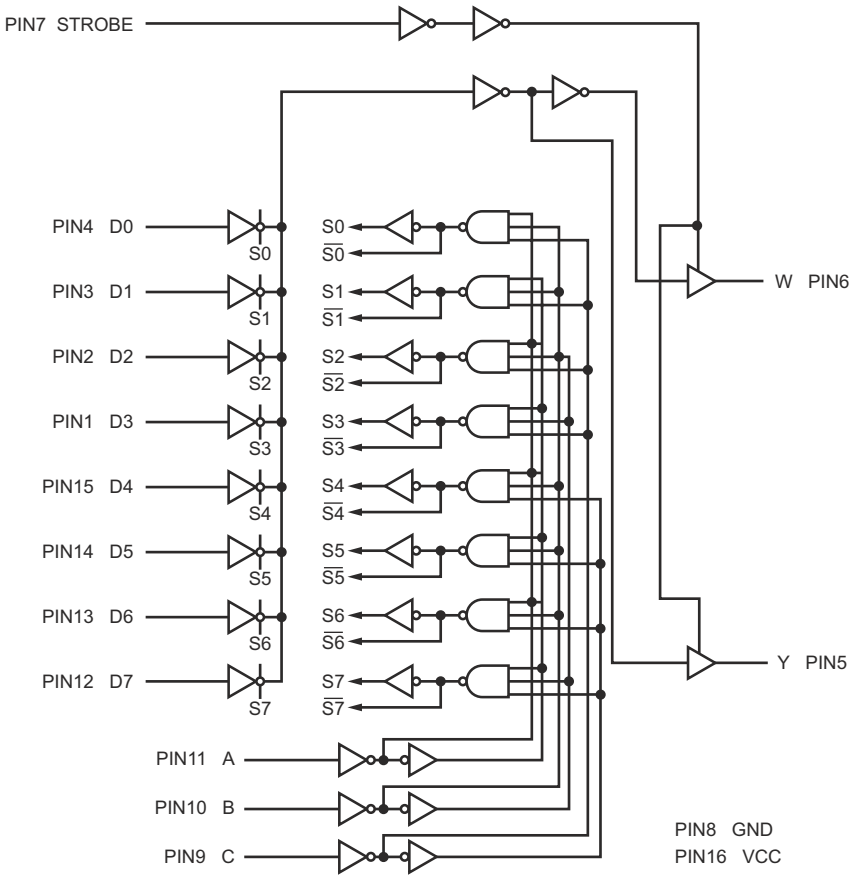
CS5333KZ
DSP BOARD: U1027



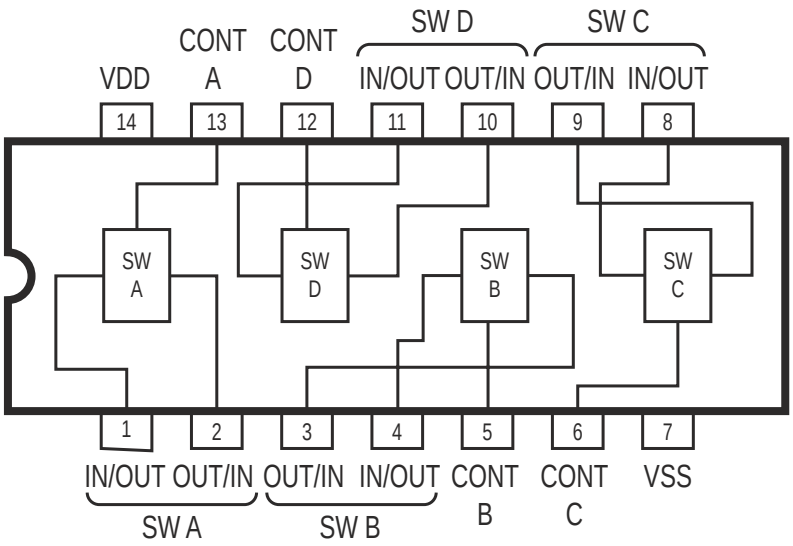
74HCU04
DIGITAL BOARD: U1201 & U1202



74HC251
DIGITAL BOARD: U1203



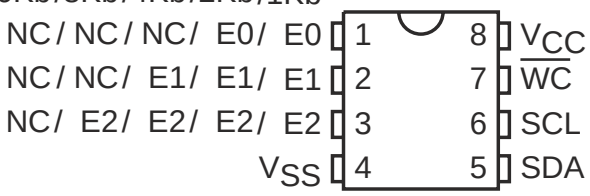
LC4966
COMPOSITE VIDEO: U4201
S-VIDEO BOARD: U4104
MULTI-CHANNEL: U6103



AT24C16
KEYBOARD: U210

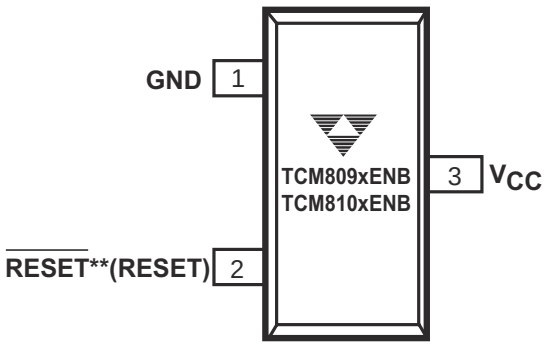
M24Cxx

16Kb/8Kb/4Kb/2Kb/1Kb



TCM810
KEYBOARD: U214

***3-Pin SOT-23B**

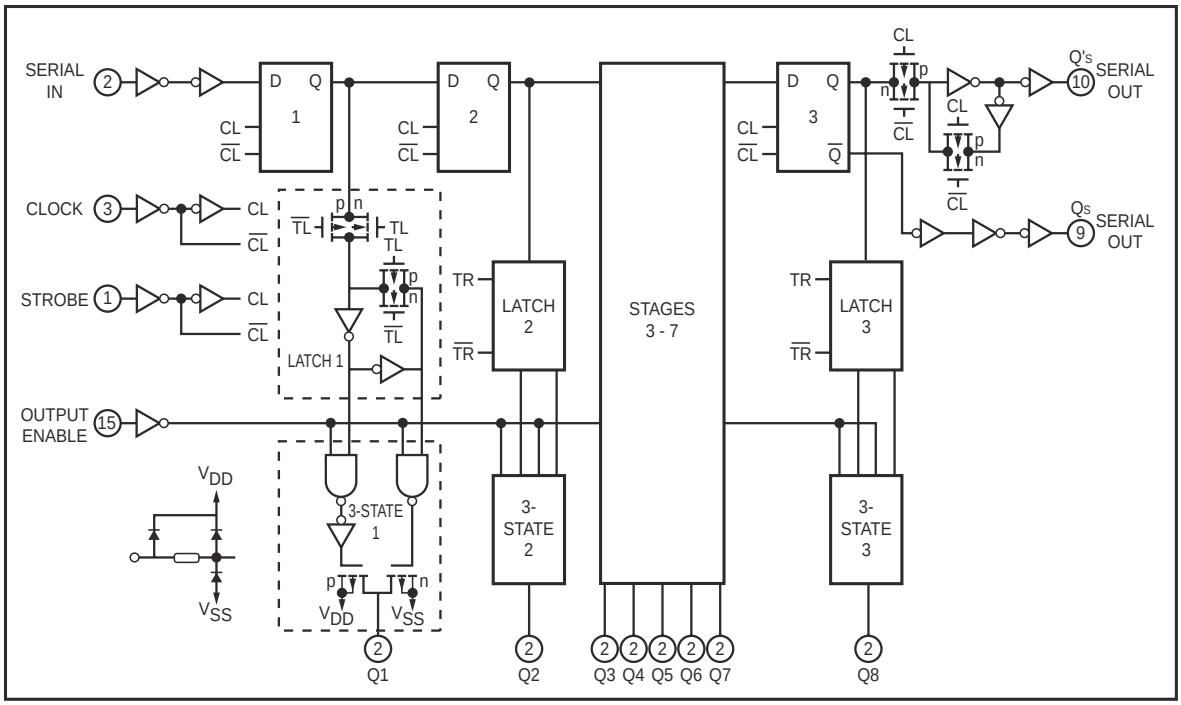


NOTE: *3-Pin SOT-23B is equivalent to JEDEC TO-236
** () is for TCM810

HCF4094B

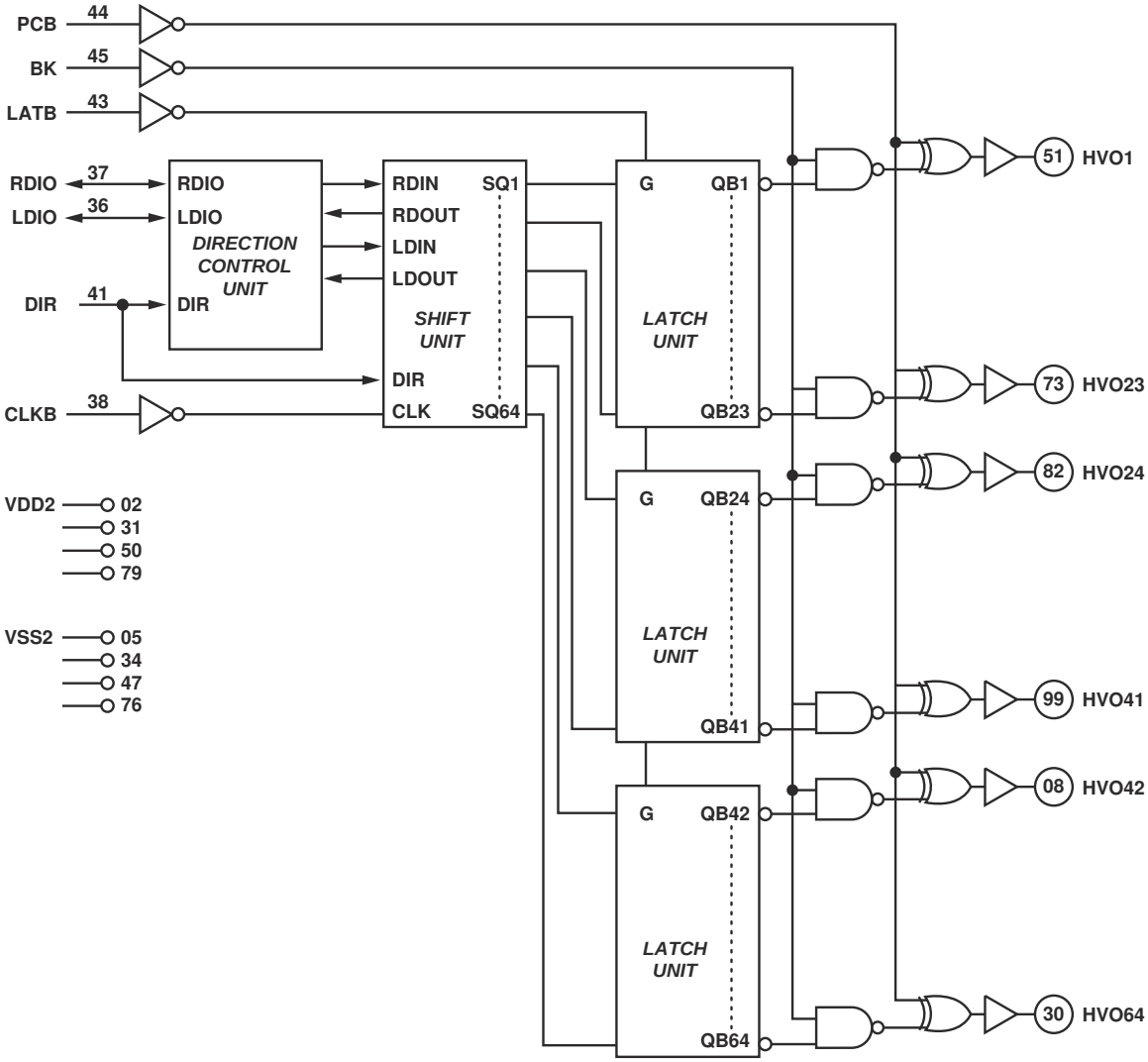
KEYBOARD: U204~U207 & U211

DSP BOARD: U1029

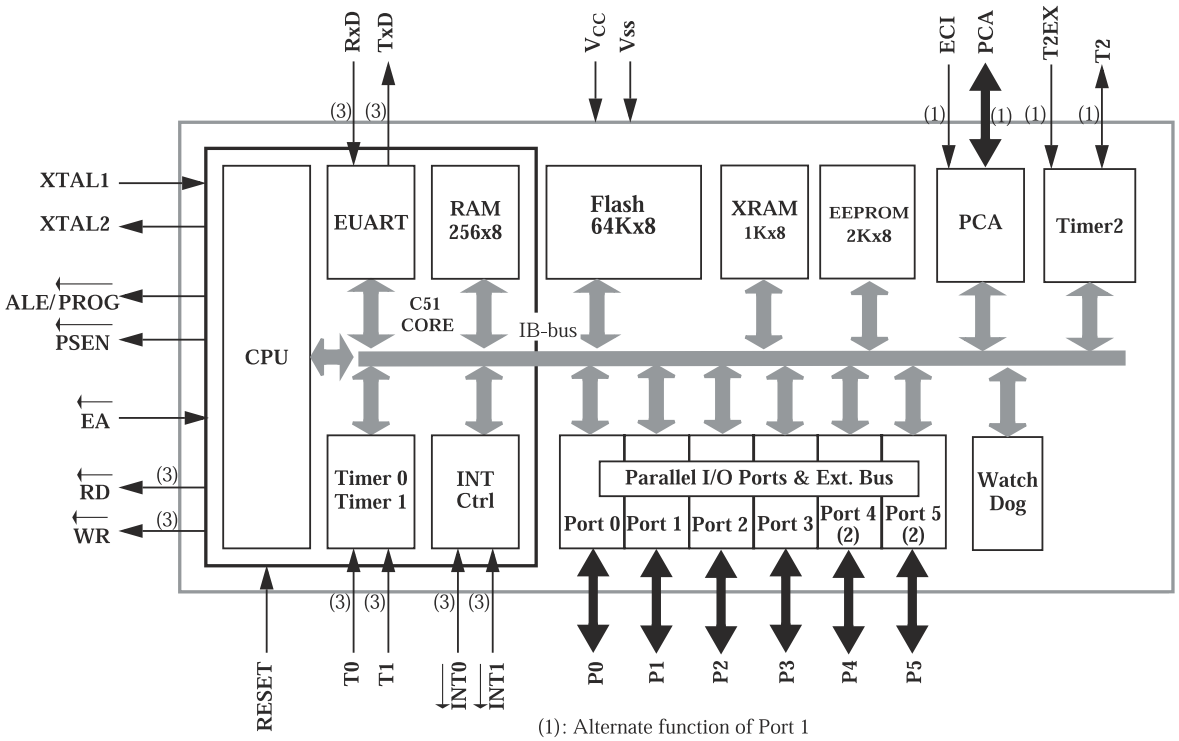


PT6306

KEYBOARD: U203



T89C51RD2
KEYBOARD: U201 & U202

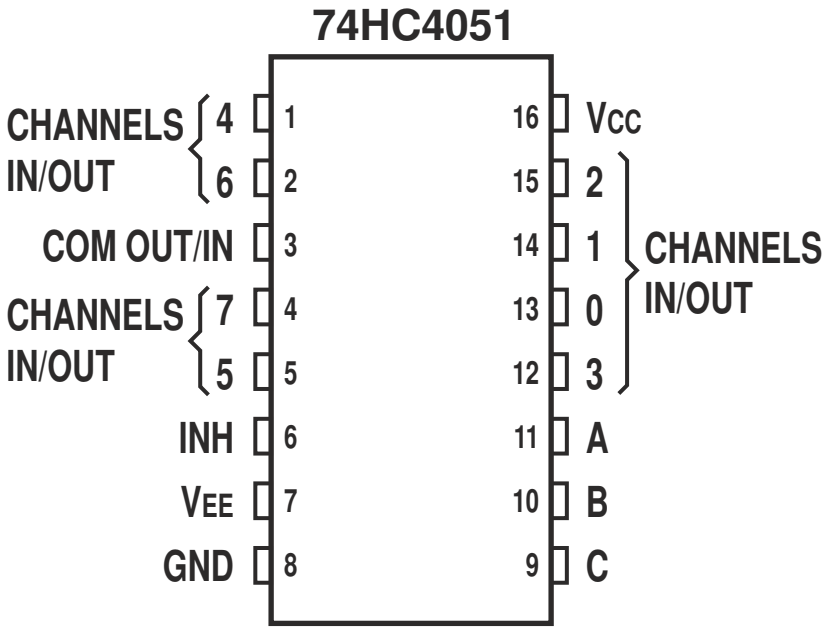


(1): Alternate function of Port 1

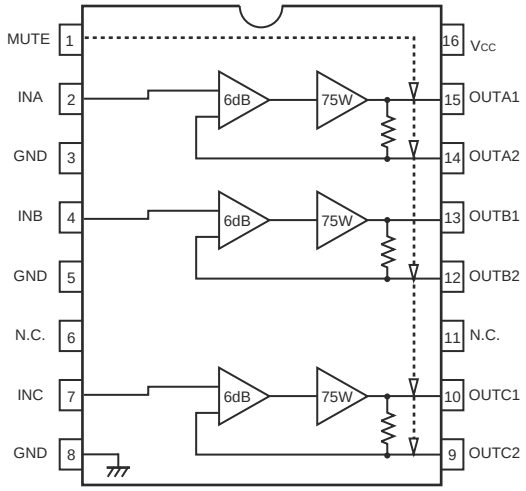
(2): Only available on high pin count packages

(3): Alternate function of Port 3

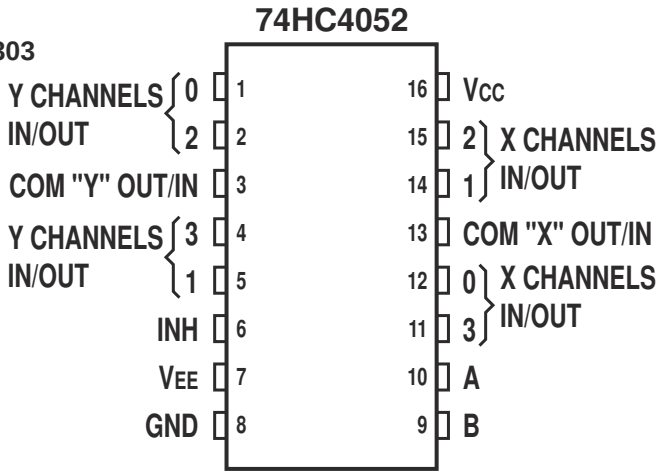
74HC4051
KEYBOARD: U208



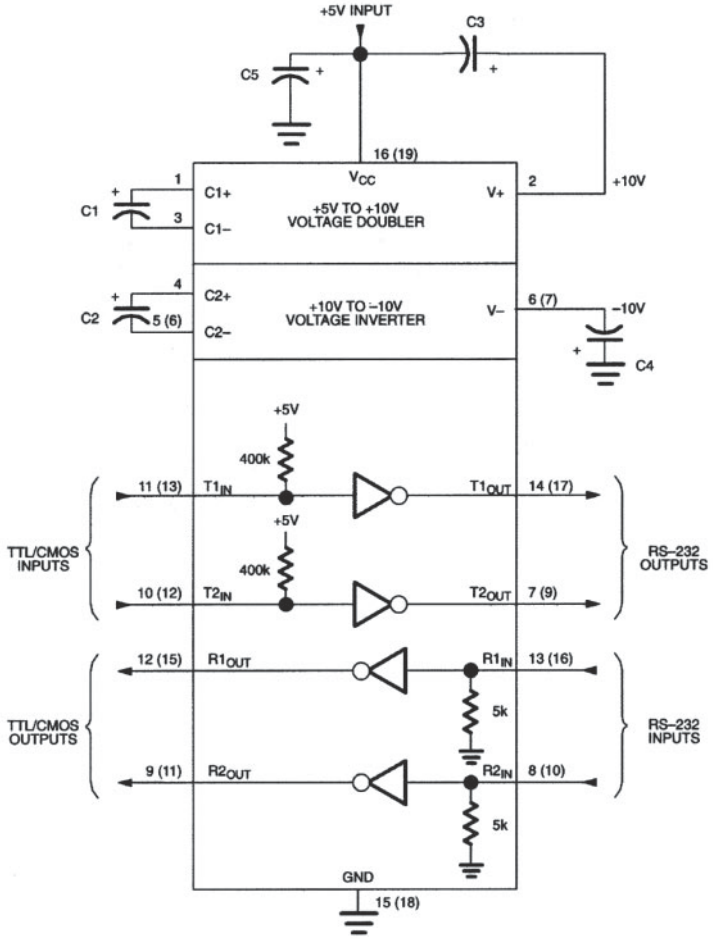
BA7660FS
COMPONENT VIDEO BOARD: U4301



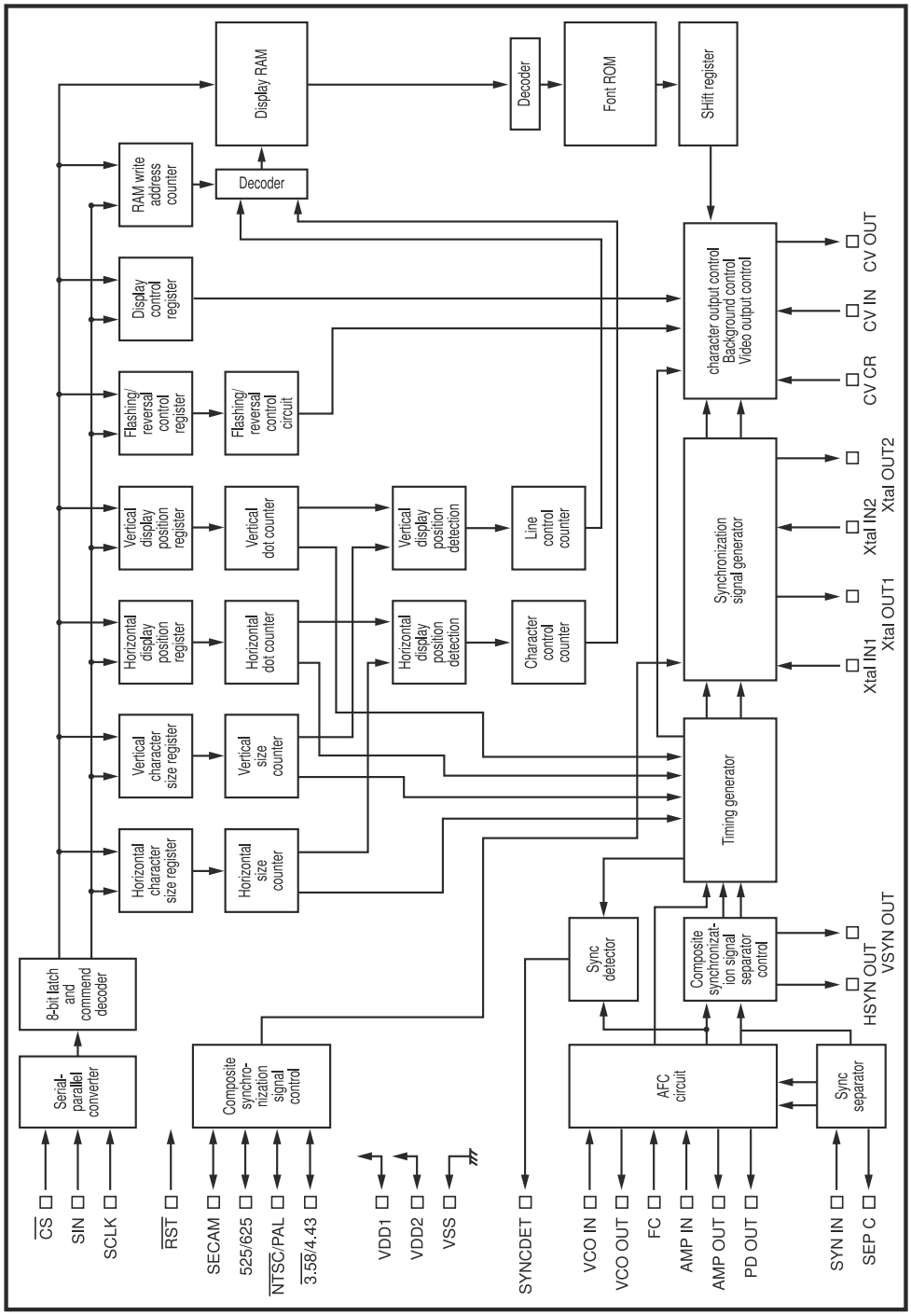
74HC4052
COMPONENT VIDEO BOARD: U4302 & U4303



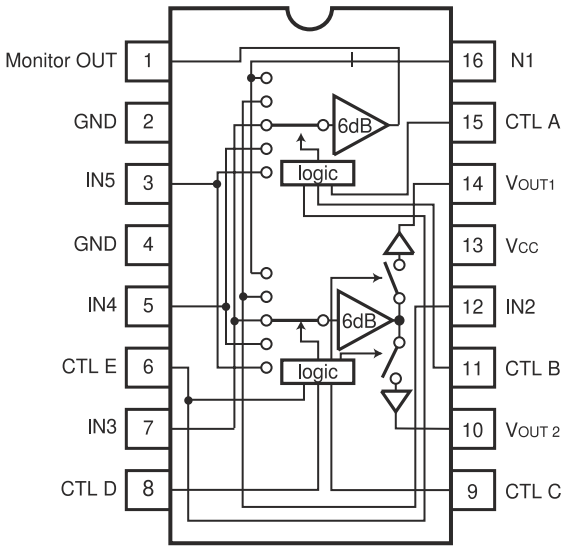
DS232A
DIGITAL BOARD: U901



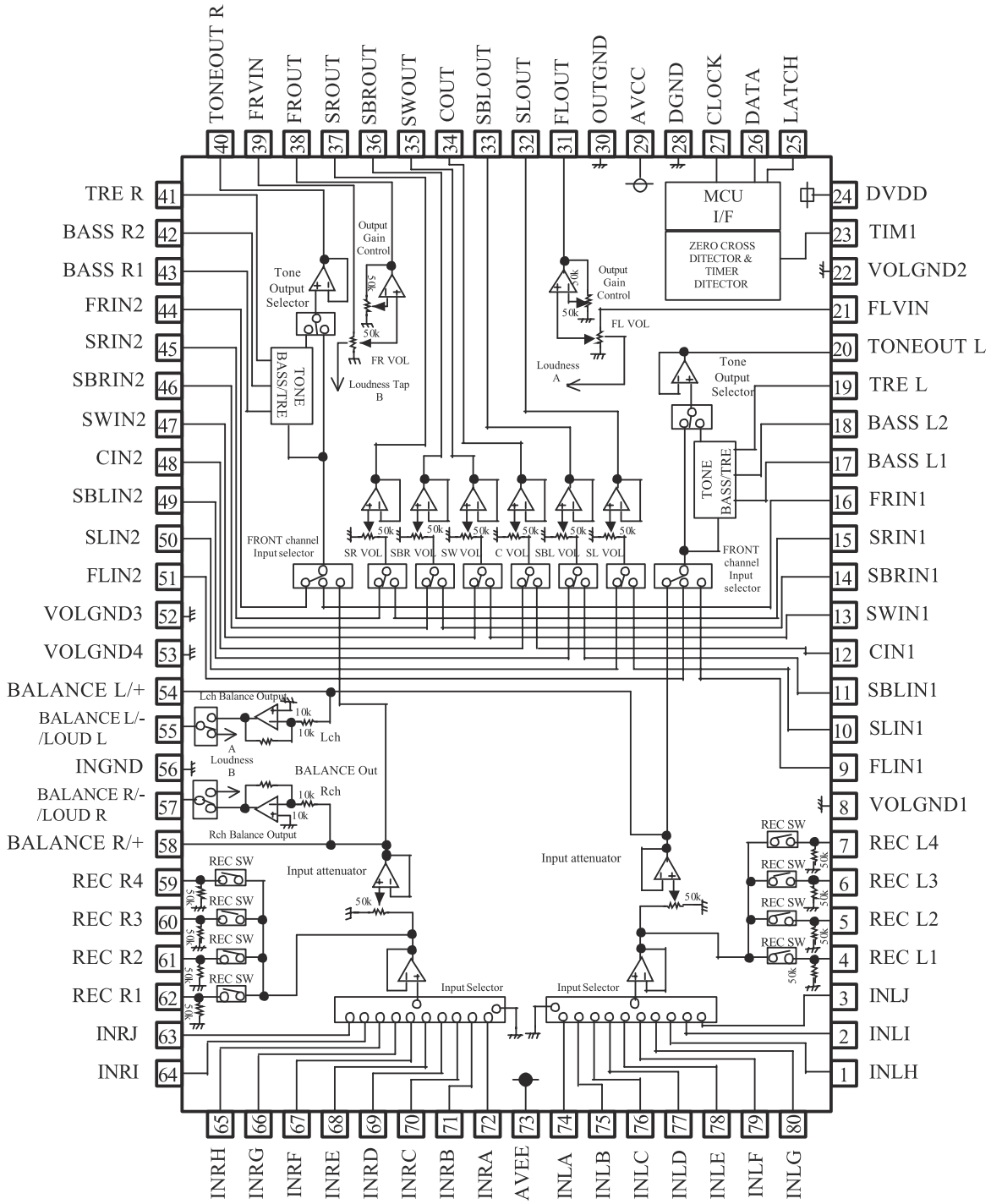
LC74763
S-VIDEO BOARD: U4101



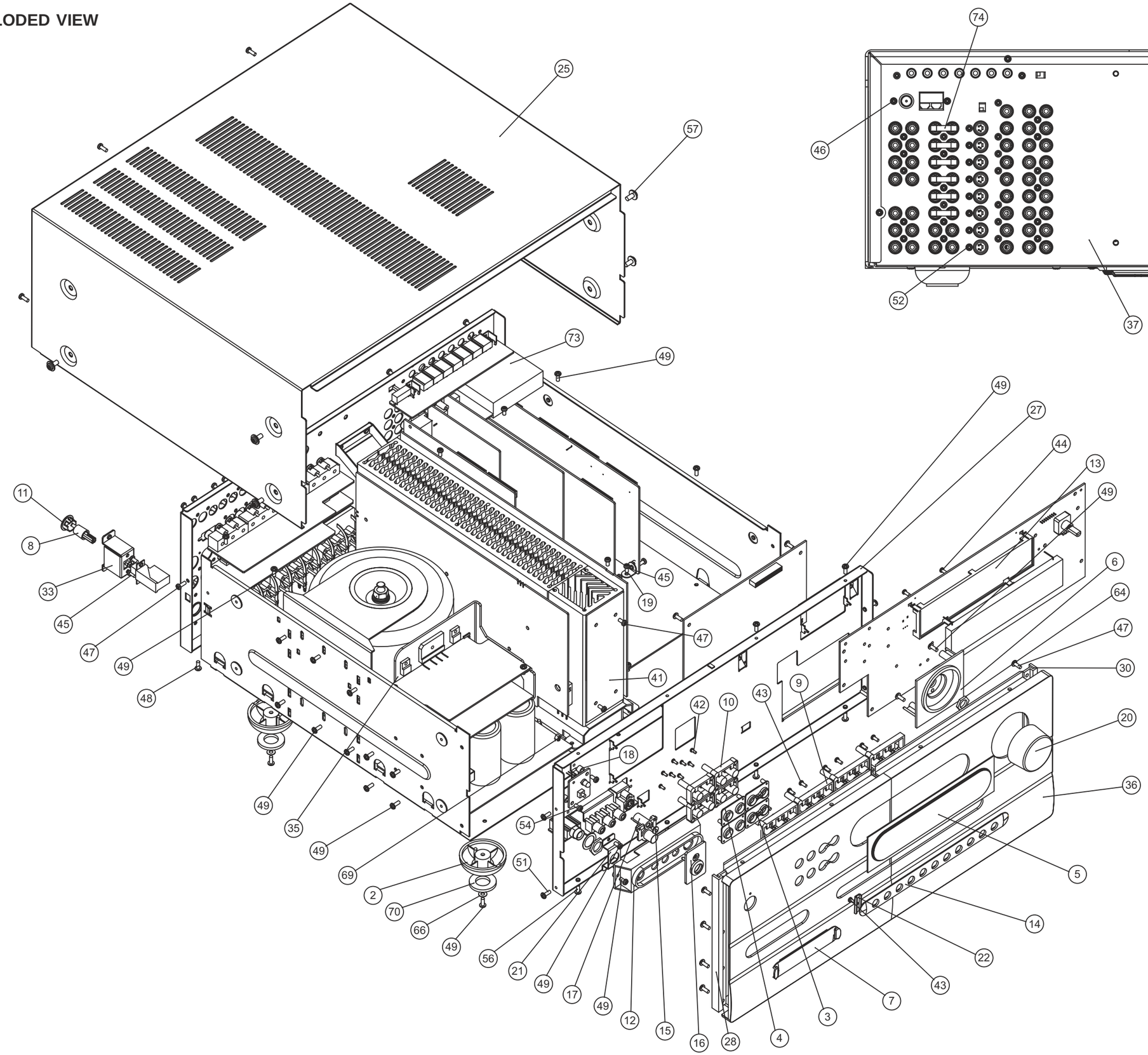
BA7625
COMPOSITE VIDEO BOARD: U4202 & U4203
S-VIDEO BOARD: U4102 & U4103



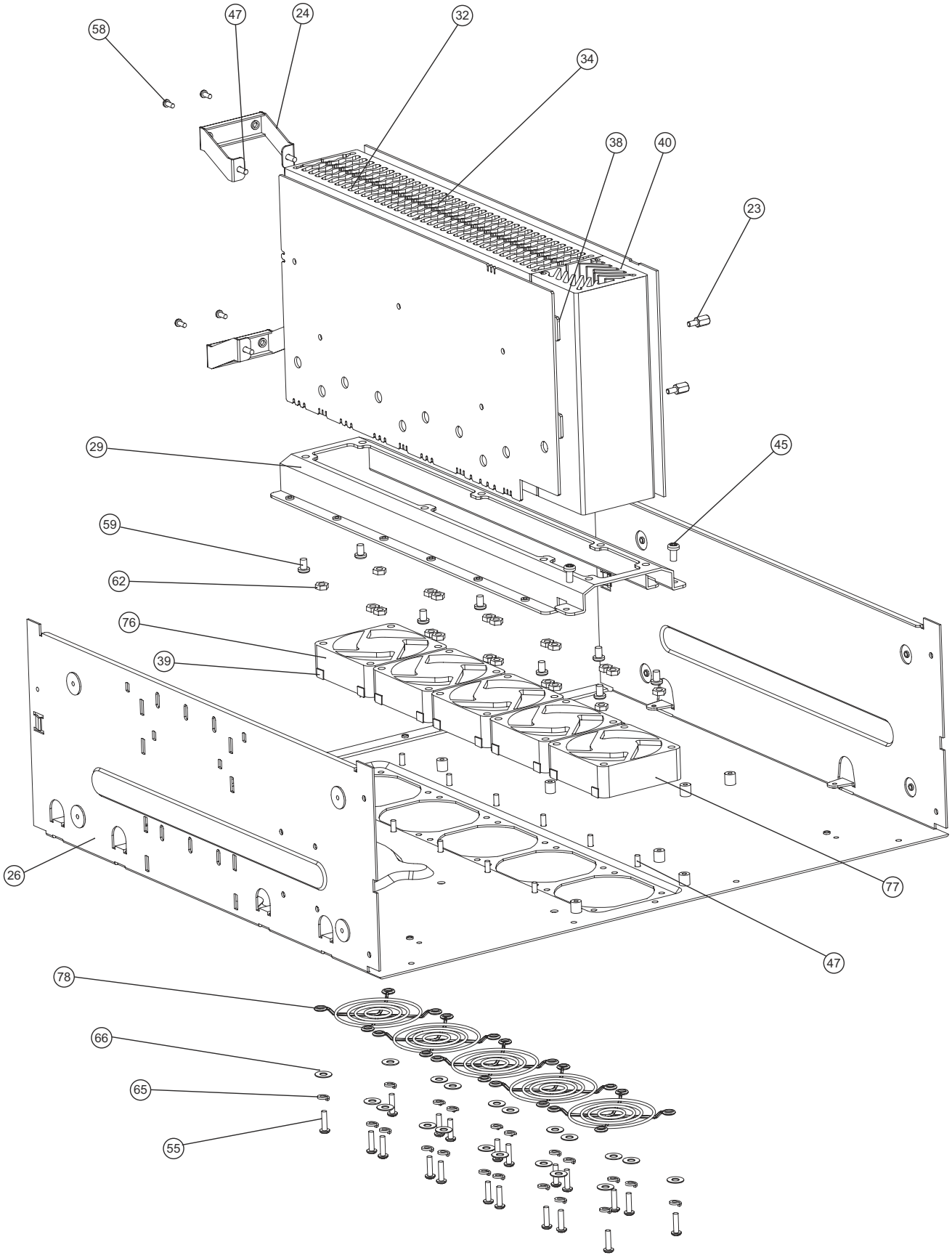
M61516FP
MULTI-CHANNEL BOARD: U6101 & U6102



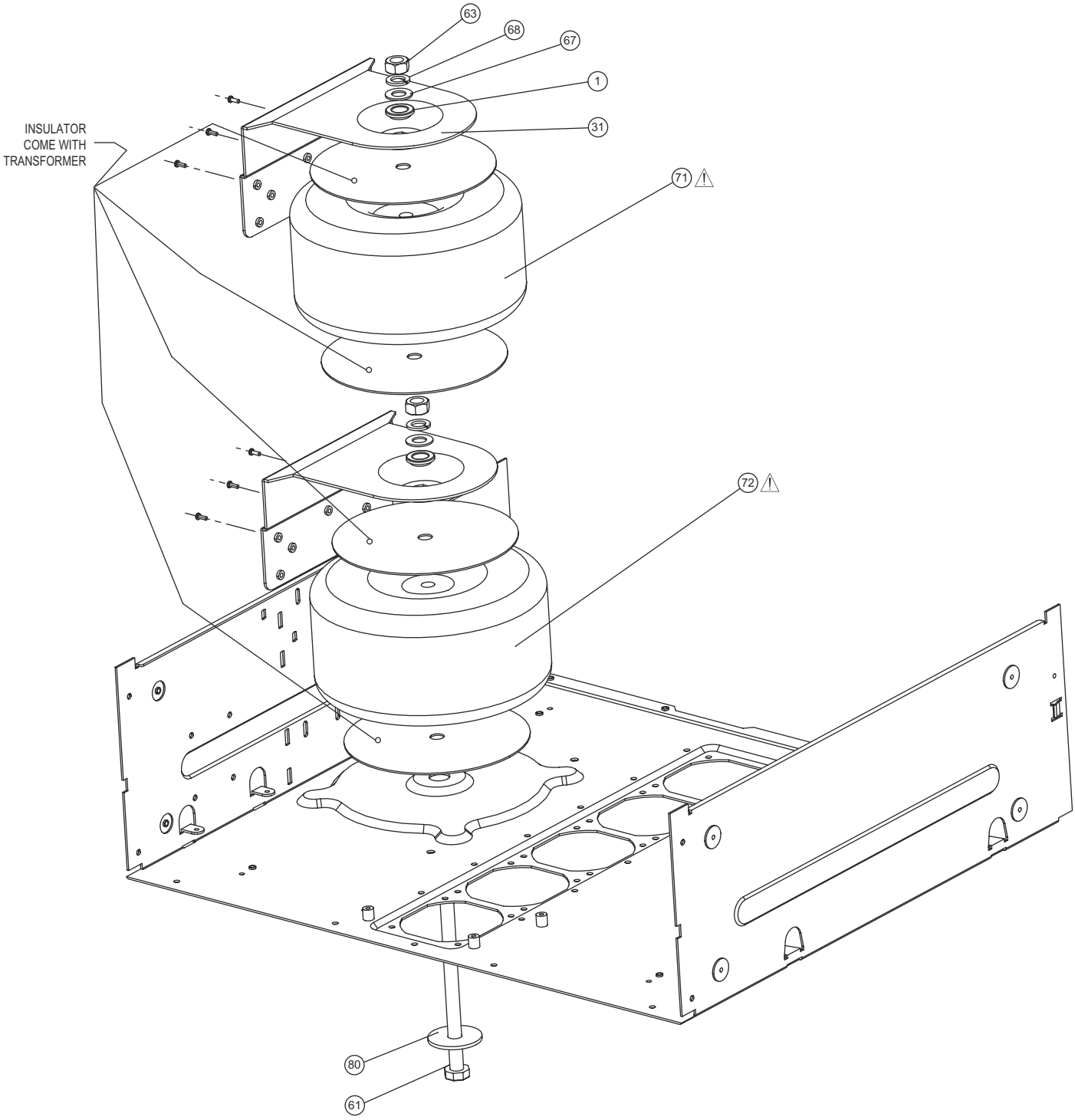
EXPLODED VIEW



EXPLODED VIEW



EXPLODED VIEW



EXPLODED VIEW PARTS LIST

Item	Part Number	Description	Qty
1	02-0000020-00-00	NYLON OD18 X 9.3 X 3.5mm WR-1809	2
2	10-0163017-01-00	PLASTIC FOOT DOME SHAPE	4
3	10-0163045-72-00	LINKED GOGGLE BEZEL	2
4	10-0163055-72-01	DUO GOGGLE BEZEL	2
5	10-0752001-00-10	WINDOW LENS	1
6	10-0752005-72-00	VOLUME BEZEL	1
7	10-0752007-72-00	VIDEO COVER	1
8	10-0752022-02-00	POWER BUTTON BLACK	1
9	10-0752032-72-01	INPUT BUTTON	4
10	10-0752042-72-01	DUO BUTTON	4
11	10-0752045-01-00	POWER BUTTON BEZEL	1
12	10-0752065-01-00	VIDEO HOUSING	1
13	10-0752075-00-00	DISPLAY BRACKET	1
14	10-0762035-72-01	INPUT BUTTON LOZENGE	1
15	10-0772011-00-00	LED LENS ROUND	1
16	10-0772022-72-01	POWER BUTTON TACT ACTIVATE	1
17	10-0772045-72-01	POWER BUTTON BEZEL	1
18	11-0163035-80-00	METAL SPACER OD6 X ID3.2 X 4.5mm	2
19	11-0570075-80-01	L BRACKET R.1	2
20	11-0752002-72-00	VOLUME KNOB ASSY	1
21	11-0752065-80-00	PHONE BRACKET	1
22	11-0752075-80-00	DUMMY BRACKET	1
23	11-0762005-80-00	HEX SPACER AF5.5 H8+6	10
24	11-0762095-80-00	HTSK SUPPORT BRACKET	2
25	11-0772003-85-11	TOP COVER	1
26	11-0772004-80-07	BOTTOM CABINET	1
27	11-0772025-80-00	SUBFASCIA	1
28	11-0772028-95-00	SIDE CAP L	1
29	11-0772035-80-00	LARGE FAN MOUNTING BRACKET	1
30	11-0772038-95-00	SIDE CAP R	1
31	11-0772055-80-00	TRANSFORMER BRACKET	2
32	11-0772058-94-02	EXTRUDED HEATSINK L	1
33	11-0772065-80-00	POWER BUTTON BRACKET	1
34	11-0772068-94-00	EXTRUDED HEATSINK R	1
35	11-0772078-80-00	HEATSINK-RECTFER	1
36	11-0773000-95-10	FASCIA	1
37*AH	11-0773006-94-11	REAL PANEL	1
37*C	11-0773016-94-10	REAR PANEL	1
38	11-0773075-80-00	MOUNTING BRACKET	4
39	11-0773085-80-00	FAN SCREW BRACKET	20
40	11-0773098-94-00	U-SHAPE HTSK	1
41	12-0773001-70-00	FIBRE PAPER 140 x 54 x 0.8mm UL GRADE	1
42	13-0200502-22-00	SELF TAP SCREW 2X5 TYPE ìBî NI PLT	8
43	13-0260600-02-00	SELF TAP SCREW 2.6 X 6 P/H TYPE ìAî NI PLT	8
44	13-0260803-02-00	SELF TAP SCREW 2.6 X 8 B/H TYPE ìAî NI PLT	16
45	14-0300600-02-00	MACHINE SCREW M3 X 6 P/H NI PLT	16
46	14-0300600-04-00	MACHINE SCREW M3 X 6 P/H BLK	4
47	14-0300600-52-00	SELF TAP SCREW 3 X 6 P/H NI-PLT TYPE ìBî	36
48	14-0300603-54-00	TAPTITE SCREW 3 X 6 B/H TYPE ìBî BLK	4
49	14-0300800-53-00	SELF TAP SCREW 3 X 8 B/B ZINC PLATED	46
50	14-0300800-54-00	SELF TAP SCREW 3 X 8 P/H BLK TYPE ìBî	4

Item	Part Number	Description	Qty
51	14-0300803-44-00	TAPTITE SCREW 3 X 8 B/H TYPE ìSî BLK PLT	4
52	14-0300803-54-00	TAPTITE SCREW 3 X 8 B/H TYPE ìBî BLK PLT	52
53	14-0300804-54-00	TAPTITE SCREW M3 X 8 K/H TYPE ìBî BLK PLT	10
54	14-0301000-54-00	TAPTITE SCREW 3 X 10 P/H TYPE ìBî BLK	8
55	14-0301400-02-00	MACHINE SCREW M3 X 14 B/H NI-PLT	20
56	14-0350803-52-00	TAPTITE SCREW 3.5 X 8.0 B/H TYPE ìBî NI PLT	5
57	14-0400802-04-00	MACHINE SCREW M4 X 8 WASHER HEAD BLK	8
58	14-0400803-54-00	TAPTITE SCREW 4 X 8 B/H BLK TYPE-B	4
59	14-0400808-54-00	TAPTITE SCREW 4 X 8 C/H TYPE -B BLK	8
60	14-0401002-04-00	MACHINE SCREW M4 X 10 WASHER HEAD BLK	1
61	14-0801515-03-02	HEX BOLT M8 L=150mm ZN PLT	1
62	15-0300240-05-20	NUT M3 X 2.4mm	20
63	15-0807600-05-30	HEX NUT M8 X 6.5 THK	2
64	15-0900220-11-30	NUT ZINC PLATED M9.0 X 2.2mm 11p	1
65	16-0320560-09-20	SPRING WASHER I/D 3.2 X O/D 5.6 0.9mm THK	50
66	16-0350080-04-35	STEEL WASHER I/D 3.5 X O/D 8.0 0.4mm THK ZINC PLT	24
67	16-0850160-10-30	METAL WASHER ID8.5 X OD16 X 1.0mm NI PLT	2
68	16-0851500-12-30	SPRING WASHER I/D 8.5 X O/D 12.5 X 1.9THK	2
69	17-0500960-00-01	PCB SUPPORTER ìKSSî	3
70	17-1402603-30-22	RUBBER FOOT I/D14 X O/D26 X 3 PORON HH-48C	4
71 ⚠	25-0090062-00-21	XFORMER PW TOROIDAL 120V/240V TI-033080	1
72 ⚠	25-0090063-00-21	XFORMER PW TOROIDAL 120V/240V TI-033081	1
73*AH	29-4000004-00-38	AM/FM TUNER MODULE KST-MB114MA0-23	1
73*C	29-4000002-00-38	AM/FM TUNER MODULE KST-MB114MA1-23	1
74	34-0061030-00-67	JUMPER PLUG PITCH 14mm	7
75*AH ⚠	34-0101003-00-63	AC OUTLET 3 PINS US POLARIZED SS-6B-1-NY	1
75*C ⚠	34-0100002-00-78	AC OUTLET EURO CEE 7 2.5A/250V A302D0060P	1
76	37-2011230-02-63	FAN DC 60 X 60 X 20mm 12V 0.13A 3000RPM W/450mm	3
77	37-2011230-03-63	FAN DC 60 X 60 X 20mm 12V 0.13A 3000RPM W/350mm	2
78	39-0000008-00-63	FAN GUARD 60mm DFG-60	5
79 ⚠	34-0101000-00-67	AC SOCKET IEC 15A/250V	1
80	16-0850300-20-30	METAL WASHER ID8.5 X OD30 X 2.0mm	1

NOTE: THE COMPONENTS IDENTIFIED BY ⚠ MARK ARE CRITICAL FOR RISK OF FIRE AND ELECTRICAL SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

<*AH > : USA, CANADIAN MODEL ONLY.

<*C > : EUROPEAN MODEL ONLY.

ELECTRICAL PARTS LIST (refer to schematic diagram for non critical component values)

Reference No.	Part No.	Description
POWER AMP MODULE	95-0907735-12-01	POWER AMPLIFIER MODULE
FRONT & CENTER AMP BOARD		
PCB ASSEMBLY	80-0907730-40-00	FRONT AND CENTER AMP ASSEMBLY
CAPACTIORS		
C501,C513,C525,C801	22-3476052-00-43	CAP ELEC SS 4.7uF 50V 20% 85C
C503,C515,C527,C805	22-4110203-10-28	CAP MYLAR MCC-R 1000P 100V 10%
C505,C517,C529,C809	22-3471022-00-28	CAP ELEC GR 470uF 16V 20% 85C
C508,C519,C531,C815	22-4115403-10-10	CAP MYLAR KT-G 150nF 100V 10%
C510,C511,C521,C522,C534,C535, C819,C821	22-3101082-00-28	CAP ELEC GR 100uF 100V 20%
C537-C539,C823	22-4210402-00-31	CAP MPF 0.1uF 63V 5% DMF 5 SERIES
C556-C558	22-1223150-28-39	CAP CER KK 0.022uF 50V 10%
C565,C566	22-3470022-00-43	CAP ELEC SS 47uF 16V 20% 85C
DIDOES		
D501-D503,D505-D507,D509-D514, D522-D528,D531-D536,D801,D803, D805,D820,D821,D8113	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
D529,D530	20-3222002-02-01	DIODE ZENER BZX55 22V 1/2W 5%
COILS		
L501-L503,L801	24-1000001-00-28	AIR COIL 0.2uH 10% 1 X 9 X 13.5 TURNS
RELAYS		
M501,M502,M505	32-3124051-03-40	RELAY POWER DC24V 5A/250V 2P1T
THERMISTORS		
M504,M507	23-6110100-00-08	THERMESTOR PTC 100 OHM
THERMAL PROTECTOR		
M506 ⚠	39-0000007-00-15	THERMAL CUT OFF SWITCH 90C UP72
TRANSISTORS		
Q501-Q503,Q511,Q513-Q515,Q523, Q525-Q527,Q535,Q801,Q803,Q805,Q821	21-0000410-00-12	XTR SS NPN HFE160-320 130MHz 2SC2362KF
Q504,Q506,Q516,Q518,Q529,Q530, Q562,Q565,Q568,Q809,Q811,Q854	21-1011210-50-12	XTR PW PNP 1A/100V TO-126 2SD600KE
Q505,Q508,Q517,Q520,Q528,Q532, Q815,Q850	21-1011611-30-12	XTR PW PNP 1.5A/160V TO-220ML 2SA1606E
Q507,Q519,Q531,Q813	21-1011610-30-12	XTR PW NPN 1.5A/160V TO-220ML 2SC4159E
Q510,Q522,Q533,Q817	21-1082310-10-00	XTR PW NPN 15A/230V TO-3P 2SC5200-O/R
Q521,Q534,Q819	21-1182310-10-00	XTR PW PNP 15A/230V TO-3P 2SA1943-O/R
Q543-Q545	21-0000380-70-14	XTR SS NPN HFE20 250MHz DTC-123ESA
Q550,Q551,Q553-Q557,Q561,Q564, Q567,Q807,Q823,Q824	21-0100410-00-12	XTR SS PNP HFE 280-560 110MHz 2SA1016KG-AA
Q563,Q566,Q569,Q855	21-1011211-50-12	XTR PW PNP 1A/100V TO-126 2SB631KE

Reference No.	Part No.	Description
RESISTORS		
R522,R545,R571,R835	30-0102106-01-64	VR SEMI-FIX RES CF 1K OHM B 30%
R523,R547,R574,R843	23-4228280-08-20	RES RN 0.22 OHM 5% 5W SIL 3 PIN
R527,R528,R548,R556,R575,R576, R829,R837	23-2100230-00-00	RES MO 10 OHM 5% 1/2W
R589-R591,R857	23-2100250-00-01	RES MO 10 OHM 5% 2W
SURR. LEFT/RIGHT/BACK AMP BOARD		
PCB ASSEMBLY	80-0907730-18-00	SURROUND LEFT/RIGHT/BACK AMP ASSEMBLY
CAPACITORS		
C554	22-3220022-00-43	CAP ELEC GS 22uF 16V 20% 85C
C801,C802,C835	22-3476052-00-43	CAP ELEC SS 4.7uF 50V 20% 85C
C805,C806,C836	22-4110203-10-28	CAP MYLAR MCC-R 1000P 100V 10%
C809,C810,C837	22-3471022-00-28	CAP ELEC GR 470uF 16V 20% 85C
C815,C816,C840	22-4115403-10-10	CAP MYLAR KT-G 150nF 100V 10%
C819-C822,C842,C843	22-3101082-00-28	CAP ELEC GR 100uF 100V 20%
C823,C824,C844	22-4210402-00-31	CAP MPF 0.1uF 63V 5% DMF 5 SERIES
C871,C873,C874	22-3102032-30-28	CAP ELEC KM 1000uF 25V 20% 105C
C872	22-3100022-00-43	CAP ELEC SS 10uF 16V 20% 85C
DIODES		
D801-D809,D814-D818,D820-D825, D871,D872,D875	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
D873	20-1001401-20-44	DIODE RECT 1A/400V DO41 1N4004
D879	20-3133912-20-36	DIODE ZENER BZX85 3.3V 1W 5%
COILS		
L801-L803	24-1000001-00-28	AIR COIL 0.2uH 10% 1 X 9 X 13.5 TURNS
RELAYS		
M801,M802	32-3124081-02-40	RELAY POWER DC24V 8A/250V 2P1T
THERMESTOR		
M807	23-6110100-00-08	THERMESTOR PTC 100 OHM
TRANSISTORS		
Q509,Q819,Q820,Q846	21-1182310-10-00	XTR PW PNP 15A/230V TO-3P 2SA1943-O/R
Q512,Q807,Q808,Q823,Q824,Q826, Q827,Q834,Q835,Q837	21-0100410-00-12	XTR SS PNP HFE 280-560 110MHz 2SA1016KG-AA
Q545,Q546,Q801-Q806,Q821,Q822, Q838-Q840,Q847	21-0000410-00-12	XTR SS NPN HFE160-320 130MHz 2SC2362KF
Q809-Q812,Q841,Q842,Q854,Q856,Q858	21-1011210-50-12	XTR PW PNP 1A/100V TO-126 2SD600KE
Q813,Q814,Q843	21-1011610-30-12	XTR PW NPN 1.5A/160V TO-220ML 2SC4159E
Q815,Q816,Q844,Q850-Q852	21-1011611-30-12	XTR PW PNP 1.5A/160V TO-220ML 2SA1606E
Q817,Q818,Q845	21-1082310-10-00	XTR PW NPN 15A/230V TO-3P 2SC5200-O/R
Q829,Q848	21-0000380-70-14	XTR SS NPN HFE20 250MHz DTC-123ESA

Reference No.	Part No.	Description
Q855,Q857,Q859	21-1011211-50-12	XTR PW PNP 1A/100V TO-126 2SB631KE
Q871	21-1036003-50-06	XTR PW 3A/60V TO-126 2SB772Q
Q872	21-0000390-70-14	XTR SS NPN HFE270-560 180MHz 2SC1740S
RESISTORS		
R8103,R843,R844	23-4228280-08-20	RES RN 0.22 OHM 5% 5W SIL 3 PIN
R8110,R857,R858	23-2100250-00-01	RES MO 10 OHM 5% 2W
R829,R830,R837,R838,R894,R898	23-2100230-00-00	RES MO 10 OHM 5% 1/2W
R835,R836,R897	30-0102106-01-64	VR SEMI-FIX RES CF 1K OHM B 30%
REGULATORS		
U871,U872	27-3001201-17-14	I.C. VOLT REG 12V 1A TO-220 NJM7812
U872	27-3000501-17-14	I.C. VOLT REG 5V 1A TO-220 NJM7805FA
DSP BOARD		
PCB ASSEMBLY	80-0907730-65-00	DSP ASSEMBLY
CAPACITORS		
C1004,C1014,C1016,C1062,C1083, C1096,C1100,C1155,C1173,C1174	22-3106052-00-43	CAP ELEC SS 1uF 50V 20% 85C
C1005	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20% 85C
C1011	22-4210402-00-31	CAP MPF 0.1uF 63V 5% DMF 5 SERIES
C1012,C1072,C1117	22-3101022-00-43	CAP ELEC SS 100uF 16V 20% 85C
C1020,C1021,C1030,C1031,C1040, C1041,C1050,C1051,C1091,C1094	22-3336052-00-43	CAP ELEC SS 3.3uF 50V 20% 85C
C1060,C1073	22-3471022-00-28	CAP ELEC GR 470uF 16V 20% 85C
C1079,C1171,C1172	22-3100022-00-43	CAP ELEC SS 10uF 16V 20% 85C
C1092,C1152-C1154	22-4210502-00-31	CAP MPF 1uF 63V 5% DMF 5 SERIES
C1109-C1112,C1001	22-3470022-00-43	CAP ELEC SS 47uF 16V 20% 85C
C1119,C1133,C1182	22-3102022-00-28	CAP ELEC GR 1000uF 16V 20% 85C
C1137,C1138,C1143,C1144	22-3100052-00-43	CAP ELEC SS 10uF 50V 20% 85C
C1002,C1003,C1008,C1009,C1013, C1015,C1017-C1019,C1061, C1074-C1076,C1078,C1081,C1082, C1090,C1093,C1095,C1099, C1124-C1128,C1150,C1151,C1177,C1178	45-0104056-57-57	CAP CER SMD 0.1uF 50V 20%
C1006,C1121	45-0221055-55-57	CAP CER SMD 220pF 50V 10%
C1007,C1010,C1175,C1176	45-0103055-55-57	CAP CER SMD 10nF 50V 10%
C1022,C1026,C1032,C1036,C1042, C1046,C1052,C1056,C1134-C1136	45-0222055-55-57	CAP CER SMD 2.2nF 50V 10%
C1025,C1029,C1035,C1039,C1045, C1049,C1055,C1059,C1114,C1130,C1131	45-0472055-55-57	CAP CER SMD 4.7nF 50V 10%
C1101-C1108	45-0101055-55-57	CAP CER SMD 100pF 50V 10%
C1132	45-0102055-55-57	CAP CER SMD 1nF 50V 10%
C1139,C1140,C1145,C1146	45-0272055-55-57	CAP CER SMD 2.7nF 50V 10%
C1141,C1142,C1147,C1148,C1024, C1028,C1034,C1038,C1044,C1048, C1054,C1058	45-0561055-55-57	CAP CER SMD 560pF 50v 10%
INDUCTORS		
L1001-L1008	24-0100127-00-28	IND CHOKE 10uH 10%

Reference No.	Part No.	Description
TRANSISTORS		
Q1001,Q1003	21-0000010-00-46	XTR SS NPN HEF 100 200MHz TO-92 C1815Y
RESISTORS		
R1001,R1002,R1079,R1083	44-0470120-51-00	RES SMD 4.7K OHM 5% 1/16W 0603
R1003-R1006	44-0330120-51-00	RES SMD 3.3K OHM 5% 1/16W 0603
R1007,R1191-R1194	44-0330920-51-00	RES SMD 33 OHM 5% 1/16W 0603
R1008,R1020-R1022,R1026,R1036, R1040,R1050,R1054,R1064,R1068, R1114,R1131-R1138,R1230	44-0100220-51-00	RES SMD 10K OHM 5% 1/16W 0603
R1009	44-0200320-51-00	RES SMD 200K OHM 5% 1/16W 0603
R1013	44-0120120-51-00	RES SMD 1.2K OHM 5% 1/16W 0603
R1023,R1030,R1037,R1044,R1051, R1058,R1065,R1072,R1120,R1121, R1126,R1127,R1027,R1028,R1033, R1035,R1041,R1042,R1047,R1049, R1055,R1056,R1061,R1063,R1069, R1070,R1075,R1077	44-0150120-51-00	RES SMD 1.5K OHM 5% 1/16W 0603
R1024,R1031,R1038,R1045,R1052, R1059,R1066,R1073	44-0620020-51-00	RES SMD 620 OHM 5% 1/16W 0603
R1078,R1084	44-0220120-51-00	RES SMD 2.2K OHM 5% 1/16W 0603
R1081,R1090,R1091	44-0270110-51-00	RES SMD 2.7K OHM 1% 1/16W 0603
R1082	44-0180110-51-00	RES SMD 1.8K OHM 1% 1/16W 0603
R1092-R1094,R1112,R1113,R1115, R1181-R1184	44-0100020-51-00	RES SMD 100 OHM 5% 1/16W 0603
R1116,R1117,R1122,R1123	44-0562117-51-00	RES SMD 5.62K OHM 1% 1/10W 0603
R1118,R1119,R1124,R1125	44-0118117-51-00	RES SMD 1.18K OHM 1%1/10W 0603
R1130,R1173-R1176	44-0470220-51-00	RES SMD 47K OHM 5% 1/16W 0603
R1166	44-0100120-51-00	RES SMD 1K OHM 5% 1/16W 0603
R1177,R1178	44-0150020-51-00	RES SMD 150 OHM 5% 1/16W 0603
R1195-R1198	44-0200120-51-00	RES SMD 2K OHM 5% 1/16W 0603
R1213-R1216	44-0750920-51-00	RES SMD 75 OHM 5% 1/16W 0603
J1001,J1002,J1101,J1102,R1010, R1099,R1171,R1172,R1217,R1218	44-0000020-51-00	RES SMD 0 OHM 5% 1/16W 0603
ICs		
U1001	27-9493260-04-70	I.C. DD DTS & MPEG DECODER PLCC CS49326
U1002-U1014	27-0324590-24-00	I.C. OCTAL TRANSCEIVER SMD 74LVC245ATTR
U1004	27-0115790-25-00	I.C. QUAD 2-INPUT SELECTOR SOIC 74HC157MIR
U1005	27-9841500-25-53	I.C. 96KHz AUDIO INTERFACE RE CEIVER CS8415A-CS
U1007	27-2325607-00-88	I.C. EEPROM 256 X 8 BYTE 70nS PDIL W27C02-70
U1008,U1009	27-0657490-18-00	I.C. OCTAL D-FLIP FLOPS 3-STAGE O/P 74LVQ574M
U1010-U1013,U1023,U1028	27-7055320-18-14	I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M
U1015,U1020	27-3031710-06-00	I.C. REG 1A TO-220(T) LM317T
U1025	27-9439200-24-53	I.C. 24BIT 192KHz STEREO DAC CS4392-KZ
U1026	27-9436000-24-53	I.C. 24BIT 192KHz 6 CH DAC CS4360KZ

Reference No.	Part No.	Description
U1027	27-9533300-24-53	I.C. 24BIT 96KHz STEREO A/D CS5333KZ
U1029	27-0540940-18-00	I.C. 8-STAGE SHIFT & STORE BUS REGISTER HCF4094BM1
OSCILLATOR		
X1001	28-5122200-04-19	CRYSTAL CLOCK OSCILLATOR 12.288MHz 50ppm
AUDIO BOARD		
PCB ASSEMBLY	80-0907730-11-00	AUDIO ASSEMBLY
CAPACITORS		
C3101-C3116	22-3220022-00-43	CAP ELEC GS 22uF 16V 20% 85C
RCA JACKS		
M301-M303	34-4060420-00-60	RCA JACK 6 R-R-R/W-W-W
RESISTORS		
J3101,J3102	44-0000027-11-00	RES SMD 0 OHM 5% 1/10W 0805
COMPONENT VIDEO BOARD		
PCB ASSEMBLY	80-0907730-42-00	COMPONENT VIDEO ASSEMBLY
CAPACITORS		
C4301-C4309	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20% 85C
C4310-C4312,C4325	22-3100022-00-43	CAP ELEC SS 10uF 16V 20% 85C
C4313-C4315	22-3106052-00-43	CAP ELEC SS 1uF 50V 20% 85C
C4316,C4318,C4320	22-3101022-00-43	CAP ELEC SS 100uF 16V 20% 85C
C4317,C4319,C4321	22-3220022-00-43	CAP ELEC GS 22uF 16V 20% 85C
DIODES		
D4301,D4302	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
RESISTORS		
J4301-J4303	44-0000027-11-00	RES SMD 0 OHM 5% 1/10W 0805
RCA JACKS		
M431-M434	34-4032020-00-60	RCA 3 G-BL-R PCB MOUNT GOLD RS-354G-18
ICs		
U4301	27-5176600-18-23	I.C. VIDEO 3-CH 75 OHM DRIVER BA7660FS
U4302,U4303	27-0140520-18-00	I.C. SINGLE DUAL TRIPLE M74HC4052MIR
DIGITAL BOARD		
PCB ASSEMBLY	80-0907730-47-00	DIGITAL ASSEMBLY
CAPACITORS		
C1213,C1214,C1221	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20% 85C

Reference No.	Part No.	Description
C1222,C1223	22-3101022-00-43	CAP ELEC SS 100uF 16V 20% 85C
C901,C902,C903,C904	22-3106052-00-43	CAP ELEC SS 1uF 50V 20% 85C
C905	22-3100022-00-43	CAP ELEC SS 10uF 16V 20% 85C
RCA JACK		
J1001-J1004,J1007	34-4010320-00-60	RCA JACK 1 BLACK PCB MOUNT GOLD
FIBRE OPTICAL		
J1005,J1006	26-6701380-01-16	FIBRE OPTIC RECEIVING UNIT GP1FA550RZ
J1008	26-6691386-00-16	FIBRE OPTIC TRANSMITTER GP1FA550TZ
ICs		
U1201,U1202	27-0804990-18-00	I.C. HEX INVERTER SMD SOP M74HCU04MIR
U1203	27-0125190-18-00	I.C. 8-CH MULTIPLEXER-SSOP 74HC251M1R
U901	27-0723200-18-43	I.C. DUAL RS-232 TRANSMITTER SMD DS232AR
ISC SURROUND BOARD		
PCB ASSEMBLY	80-0907730-74-01	ISC SURROUND ASSEMBLY
CAPACITORS		
C8201-C8204	22-4210402-00-31	CAP MPF 0.1uF 63V 5% DMF 5 SERIES
C8206-C8210	22-3100022-00-43	CAP ELEC SS 10uF 16V 20% 85C
DIODES		
D8201	20-5010401-50-47	DIODE BRI 10A/400V KBK10G
D8202,D8203	20-1912601-90-45	DIODE RECT 12A/600V TO-220 TYN612
D8204,D8205	20-3212002-00-36	DIODE ZENER BZX55 12V 1/2W 5%
D8206,D8207	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
TRANSISTORS		
Q8201,Q8203,Q8205	21-0000010-00-46	XTR SS NPN HEF 100 200MHz TO-92 C1815Y
Q8202,Q8204	21-0100100-00-46	XTR SS PNP HFE 100 200MHz TO-92 A1015Y
Q8206,Q8207	21-0100410-00-12	XTR SS PNP HFE 280-560 110MHz 2SA1016KG-AA
RESISTORS		
R8201,R8202	23-4228280-08-20	RES RN 0.22 OHM 5% 5W SIL 3 PIN
R8203	30-0503106-02-22	VR SEMI-FIXED RESISTOR CF 50K OHM 30%
R8222,R8223	23-2402260-00-00	RES MO 4K OHM 5% 3W
IC		
U8102	27-7055320-18-14	I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M

Reference No.	Part No.	Description
ISC FRONT BOARD		
PCB ASSEMBLY	80-0907730-74-00	ISC SURROUND ASSEMBLY
CAPACITORS		
C8101-C8104,C816-C820	22-4210402-00-31	CAP MPF 0.1uF 63V 5% DMF 5 SERIES
C8106,C8107,C8108,C8109,C9110	22-3100022-00-43	CAP ELEC SS 10uF 16V 20% 85C
DIDOES		
D8101	20-5010401-50-47	DIODE BRI 10A/400V KBK10G
D8102,D8103	20-1912601-90-45	DIODE RECT 12A/600V TO-220 TYN612
D8104,D8105	20-3212002-00-36	DIODE ZENER BZX55 12V 1/2W 5%
D8106,D8107	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
TRANSISTORS		
Q8101,Q8103,Q8105	21-0000010-00-46	XTR SS NPN HEF 100 200MHz TO-92 C1815Y
Q8102,Q8104	21-0100100-00-46	XTR SS PNP HFE 100 200MHz TO-92 A1015Y
Q8106,Q8107	21-0100410-00-12	XTR SS PNP HFE 280-560 110MHz 2SA1016KG-AA
RESISTORS		
R8101,R8102	23-4228280-08-20	RES RN 0.22 OHM 5% 5W SIL 3 PIN
R8103	30-0503106-02-22	VR SEMI-FIXED RESISTOR CF 50K OHM 30%
R8122,R8123	23-2402260-00-00	RES MO 4K OHM 5% 3W
R837-R839 ⚠	23-5228330-00-00	RES FUSIBLE 0.22 OHM 10% 1/2W
R840,R841	23-2228232-00-00	RES MO 0.22 OHM 5% 1/2W
IC		
U8101	27-7055320-18-14	I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M
KEYBOARD		
PCB ASSEMBLY	80-0907730-02-00	KEYBOARD ASSEMBLY
CAPACITORS		
C208-C211	22-3470022-00-43	CAP ELEC SS 47uF 16V 20% 85C
C212	22-3102012-00-28	CAP ELEC GR 1000uF 10V 20% 85C
C214	22-3107052-00-43	CAP ELEC SS 0.1uF 50V 20% 85C
C223	22-1103150-17-39	CAP CER KK 10nF 50V 10%
C224	22-3472032-00-28	CAP ELEC GR 4700uF 25V 20% 85C
C241,C242	45-0102055-55-57	CAP CER SMD 1nF 50V 10% X7R 0603
C251-C254	45-0330055-55-57	CAP CER SMD 33pF 50V 10% X7R 0603
C255	22-3106052-00-43	CAP ELEC SS 1uF 50V 20% 85C
C201,C202,C213,C215-C222,C256	45-0104056-57-57	CAP CER SMD 0.1uF 50V 20% Y5V 0603
IR RECEIVER		
D201	26-0941380-00-00	IR RX 940nm 37.9KHz SHIELD ST FM-7138TE5

Reference No.	Part No.	Description
DIODES		
D212,D214-D218	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
D220	20-3251902-00-01	DIODE ZENER BZX55 5.1V 1/2W 5%
ENCODER		
M201	35-6001219-00-08	ENCODER ROTATRY L=20mm VER W/O CLICK
TRANSISTORS		
Q201	21-0100100-00-46	XTR SS PNP HFE 100 200MHz TO-92 A1015Y
Q203,Q204,Q205,Q206	21-0000010-00-46	XTR SS NPN HEF 100 200MHz TO-92 C1815Y
RESISTORS		
R201-R207,R213,R219,R223-R227, R229,R231,R232	44-0100220-51-00	RES SMD 10K OHM 5% 1/16W 0603
R217,R218	44-0150120-51-00	RES SMD 1.5K OHM 5% 1/16W 0603
R220,R253-R268	44-0470120-51-00	RES SMD 4.7K OHM 5% 1/16W 0603
R221,R230	44-0220120-51-00	RES SMD 2.2K OHM 5% 1/16W 0603
R222	44-0220020-51-00	RES SMD 220 OHM 5% 1/16W 0603
R225,R234,R216	44-0100120-51-00	RES SMD 1K OHM 5% 1/16W 0603
R233	44-0470220-51-00	RES SMD 47K OHM 5% 1/16W 0603
R238	44-0120220-51-00	RES SMD 12K OHM 5% 1/16W 0603
R241,R242	44-0100020-51-00	RES SMD 100 OHM 5% 1/16W 0603
R251,R252	44-0100520-51-00	RES SMD 10M OHM 5% 1/16W 0603
R269	44-0000027-11-00	RES SMD 0 OHM 5% 1/10W 0805
TACT SWITCHES		
S201-S219	35-1001117-00-67	SW TACT NO 1P1T 50mA/12V
ICs		
U201,U202	27-1086401-04-25	I.C. MCU SCRAM PLCC T89C51RD2-SL
U203	27-9630600-14-62	I.C. VFD DRIVER SMD QFP PT6306
U204-U207,U211	27-0540940-18-00	I.C. SHIFT-AND-STORE BUS REGISTER HCF4094BM1
U208	27-0140510-18-00	I.C. 8 CH ANALOG MUX/DEMUX SMD M74HC4051MIR
U209	27-0324591-18-00	I.C. OCTAL BUS TRANSCEIVER 74VHC245M
U210	27-2300225-00-25	I.C. EEPROM 2K BYTE 250nS PDIL AT24C16
U214	27-9810000-28-36	I.C. RESET MONITORS TCM810LENB713
VFD		
VD201	41-4340100-00-13	VFD 16-BT-93GNK
CRYSTALS		
X201A,X202A	28-5200200-06-19	CRYSTAL 20.000MHz 30ppm HC-49S
LED BOARD		
PCB ASSEMBLY	80-0907730-32-00	LED ASSEMBLY

Reference No.	Part No.	Description
LED		
D211	26-0012587-01-10	LED RED-GREEN 5X807mm COMMON ANODE
TACT SWITCHES		
S220	35-1001117-00-67	SW TACT NO 1P1T 50mA/12V
MAIN BOARD		
PCB ASSEMBLY	80-0907730-00-00	MAIN ASSEMBLY
CAPACITORS		
C701,C705,C706,C716,C725	22-3102032-30-28	CAP ELEC KM 1000uF 25V 20% 105C
C702,C719,C723	22-3101022-30-13	CAP ELEC KM 100uF 16V 20% 105C
C704	22-3332042-30-35	CAP ELEC KM 3300uF 35V 20% 105C
C707	22-3222042-30-49	CAP ELEC KM 2200uF 35V 20% 105C
C710	22-3470052-00-43	CAP ELEC SS 47uF 50V 20% 85C
C711-C713	22-3102052-30-28	CAP ELEC KM 1000uF 50V 20% 105C
C715	22-4210502-00-31	CAP MPF 1uF 63V 5% DMF 5 SERIES
C721,C724	22-3222032-30-28	CAP ELEC KM 2200uF 25V 20% 105C
DIODES		
D701-D710	20-1001401-20-44	DIODE RECT 1A/400V DO41 1N4004
D711	20-3203102-00-01	DIODE ZENER BZX55 30V 1/2W 5%
D715	20-5004700-50-02	DIODE BRI 4A/70V RS402L
D716-D718	20-3951943-50-01	DIODE ZENER ZY5.1 2W 10%
TRANSISTORS		
Q701	21-1011210-50-12	XTR PW PNP 1A/100V TO-126 2SD600KE
REGULATORS		
U701,U704-U706	27-3000501-17-14	I.C. VOLT REG 5V 1A TO-220 NJM7805FA
U702,U707	27-3001201-17-14	I.C. VOLT REG 12V 1A TO-220 NJM7812
U703	27-3101201-13-14	I.C. VOLT REG TO-220F NJM7912
MULTI-CH BOARD		
PCB ASSEMBLY	80-0907730-64-00	MULTI-CHANNEL ASSEMBLY
CAPACITORS		
C607,C611,C612,C747-C754, C6201-C6215,C6217	22-3220022-00-43	CAP ELEC GS 22uF 16V 20% 85C
C626	22-3221022-00-43	CAP ELEC SS 220uF 16V 20% 85C
C627,C628,C633,C634	22-3101022-00-43	CAP ELEC SS 100uF 16V 20% 85C
C6301-C6304	45-0104056-57-57	CAP CER SMD 0.1uF 50V 20% Y5V 0603
C677,C678,C689,C690	22-3470022-00-43	CAP ELEC SS 47uF 16V 20% 85C
C757,C758	22-4282302-00-31	CAP MPF 0.082uF 63V 5% DMF 5 SERIES
C759-C762,C769,C770,C773,C774	22-4210402-00-31	CAP MPF 0.1uF 63V 5% DMF 5 SERIES
C763-C766	22-4247302-00-31	CAP MPF 0.047uF 63V 5% DMF 5 SERIES
C767,C768,C771,C772	22-4233202-00-31	CAP MPF 0.0033uF 63V 5% DMF 5 SERIES

Reference No.	Part No.	Description
C775,C776,C755,C756	22-8226052-00-28	CAP ELEC 2.2uF 50V 20% NON-POLAR
C6301-C6304	45-0104056-57-57	CAP CER SMD 0.1uF 50V 20% Y5V 0603
DIODES		
D601	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
D602,D604	20-3275902-00-01	DIODE ZENER BZX55 7.5V 1/2W 5%
INDUCTORS		
L6101,L6102	24-0101108-00-28	IND CHOKE 100uH 10%
RCA JACKS		
M6101,M6103	34-4060420-00-60	RCA JACK 6 R-R-R/W-W-W
M6102	34-4020320-00-60	RCA JACK 2 B/B GOLD RS-253G-02
TRANSISTORS		
Q6101	21-0000140-00-11	XTR SS NPN HFE 120 100MHz TO-92 SS8050C
Q6102	21-0100131-00-11	XTR SS PNP HFE 170 1.5A TO-92 SS8550C
Q6103	21-0100390-70-14	XTR SS PNP HFE 30 250MHz SPT DTA 114ESA
Q6104	21-0000400-70-14	XTR SS NPN HFE30 250MHz SPT DTC114ESA
Q6105,Q6106	21-0000360-00-00	XTR SS NPN HFE200-700 30MHz 2SC2878A
Q6107	21-0000450-70-14	XTR SS NPN 68 250MHz SPT DTA144ESA
Q6108,Q6109	21-0000120-70-14	XTR SS NPN HFE 68 30MHz SPT DTC144ES
ICs		
U6101,U6102	27-7661516-14-01	I.C. SOUND PROCESSOR VOL+TONE M61516FP
U6103	27-9496600-21-02	I.C. QUAD BILATERAL SWITCH LC4966
U6104-U6107	27-7055320-18-14	I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M
PRE-OUT BOARD		
PCB ASSEMBLY	80-0907730-63-00	PRE-OUT ASSEMBLY
CAPACITORS		
C637,C642,C647,C652,C657,C662, C667,C672,C700,C705	22-3100022-00-43	CAP ELEC SS 10uF 16V 20% 85C
C640,C645,C650,C655,C660,C665, C670,C675,C703,C708	22-3220022-00-43	CAP ELEC GS 22uF 16V 20% 85C
C679,C680,C691,C692	22-3470022-00-43	CAP ELEC SS 47uF 16V 20% 85C
DIODES		
D611-D614	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
INDUCTORS		
L602-L609	24-0100127-00-28	IND CHOKE 10uH 10%

Reference No.		Part No.	Description
RCA JACKS			
M607,M609,M610		34-4040500-00-60	RCA JACK 4 R-W/R-WRS-413G-08
M608,M612		34-4020300-00-60	RCA JACK 2 B/B RS-213G-02
TRANSISTORS			
Q608-Q615,Q617,Q629,Q630,Q632,Q633		21-0000350-70-00	XTR SS NPN HFE200-700 30MHz SPT RN1241A
Q616,Q618,Q620,Q622,Q624,Q631		21-0100390-70-14	XTR SS PNP HFE 30 250MHz SPT DTA 114ESA
RESISTORS			
R635,R642,R647,R654,R659,R666, R678,R694,R701		23-1220102-00-00	RES MF 2.2K OHM 1% 1/6W
R636,R643,R648,R655,R660,R667, R672,R679,R695,R702		23-1330002-00-00	RES MF 330 OHM 1% 1/6W
ICs			
U609-U613		27-7055320-18-14	I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M
PSU BOARD			
PSU ASSEMBLY *AH		80-0907730-01-00	PSU ASSEMBLY
PSU ASSEMBLY *C		80-0907730-01-01	PSU ASSEMBLY
CAPACITORS			
C752		22-3476052-00-43	CAP ELEC SS 4.7uF 50V 20% 85C
C753		22-4210202-00-31	CAP MPF 0.001uF 63V 5% DMF 5 SERIES
C763	⚠	22-1103960-37-71	CAP CER 0.01uF 250VAC 20%
DIODES			
D751,D756		20-0000000-00-13	DIODE SW 4NS DO35 1N4148
D752-D755		20-1001401-20-44	DIODE RECT 1A/400V DO41 1N4004
FUSES & FUSES HOLDER			
F751*AH	⚠	33-0321111-00-88	FUSE 20A 250V SLOW BLOW 6X32mm 6S UL/CSA
F751*C	⚠	33-0161006-00-88	FUSE 10A/250VAC TIME-LAG 5 X 20mm UL/VDE 5D
F752*AH	⚠	33-0111006-00-88	FUSE 1.6A 250V TIME LAG LBC 5x20mm 5T UL/CSA/VDE/SEMKO
F752*C	⚠	33-0151006-00-48	FUSE 800mA 250V TIME LAG LBC 5x20mm TSD UL/CSA/VDE/SEMKO
FH751*AH		33-1100000-00-88	FUSE CLIP 0.05mm FOR 6mm FC-63-11
FH751*C, FH752		33-1000000-00-88	FUSE CLIP 0.05mm FC-53-11
TRANSISTOR			
Q751		21-0000010-00-46	XTR SS NPN HEF 100 200MHz TO-92 C1815Y
RESISTORS			
R751	⚠	23-5228330-00-00	RES FUSIBLE 0.22 OHM 10% 1/2W

Reference No.	Part No.	Description
R754 ⚠	23-8395232-00-06	COND PATH RESISTOR 3.9M OHM 1/2W 5% RNV1/2
STANDBY TRANSFORMER		
T751	25-0040021-31-18	XFOFMER PW EI-35 100V/220V T05382B
RELAY		
T751	32-3112210-00-40	RELAY POWER DC12V 20A 220VAC 1P1T
POWER SWITCH BOARD		
PCB ASSEMBLY	80-0907730-48-00	POWER SWITCH ASSEMBLY
CAPACITOR		
C764 ⚠	22-1103960-37-71	CAP CER 0.01uF 250VAC 20%
POWER SWITCH		
S751 ⚠	35-0101109-00-78	POWER SWITCH TV-8 10A/250VAC PS3-22SPA-P7AA
SECONDARY BOARD		
PCB ASEMBLY	80-0907530-27-00	SECONDARY ASSEMBLY
CAPACITORS		
C801-C804	22-3123072-00-41	CAP ELEC LP 12000uF 80V 20%
DIODES		
D801,D802	20-5125401-50-02	BRIDGE RECTIFIER 25A 400V MP254W BR-25W
SPEAKER BOARD		
PCB ASSEMBLY	80-0907730-67-00	SPEAKER ASSEMBLY
SPEAKER TERMINAL		
M5101,M8101,M5102	34-3000021-00-80	SPEAKER TERMINAL 6P BINDING R/B
S-VIDEO BOARD		
PCB ASSEMBLY	80-0907730-26-00	S-VIDEO ASSEMBLY
CAPACITORS		
C4101-C4107,C4109-C4111,C4113-C4115,C4117-C4120,C4153,C4157	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20% 85C
C4108,C4112,C4116,C4156	22-3471012-00-28	CAP ELEC GR 470uF 10V 20% 85C
C4123,C4124	22-3221012-00-43	CAP ELEC SS 220uF 10V 20% 85C
C4134,C4145,C4149,C4158	22-3101012-00-43	CAP ELEC SS 100uF 10V 20% 85C
C4136,C4146	22-4247402-00-31	CAP MPF 0.47uF 63V 5% DMF 5 SERIES
C4137,C4133,C4141	22-3106052-00-43	CAP ELEC SS 1uF 50V 20% 85C
C4138	22-7200210-00-09	CAP TRIMMER 20pF 20%
C4144	22-3477052-00-43	CAP ELEC SS 0.47uF 50 20% 85C
C4150	22-3470022-00-43	CAP ELEC SS 47uF 16V 20% 85C
C4151	22-3100022-00-43	CAP ELEC SS 10uF 16V 20% 85C

Reference No.	Part No.	Description
DIODES		
D4101-D4107	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
INDUCTORS		
L4101	24-0569107-00-28	IND CHOKE 5.6uH 10%
L4102	24-0220107-00-28	IND CHOKE 22uH 10%
DIN JACKS		
M411-M418	34-4110300-00-60	DIN JACK 1 BLACK PCB MOUNT MD-113
Q4101,Q4103,Q4122,Q4131	21-0000120-70-14	XTR SS NPN HFE 68 30MHz SPT DTC144ES
Q4102	21-0000450-70-14	XTR SS NPN 68 250MHz SPT DTA144ESA
Q4107-Q4112,Q4116-Q4119	21-0100370-70-14	XTR SS PNP HFE 270-560 140MHz 2SA933AS
Q4113,Q4114,Q4121,Q4124,Q4125, Q4128,Q4130,Q4133	21-0000360-00-00	XTR SS NPN HFE200-700 30MHz 2SC2878A
Q4115,Q4126,Q4127	21-0000390-70-14	XTR SS NPN HFE270-560 180MHz 2SC1740S
Q4120,Q4123	21-0000380-70-14	XTR SS NPN HFE20 250MHz DTC-123ESA
Q4132	21-0000010-00-46	XTR SS NPN HEF 100 200MHz TO-92 C1815Y
SLIDE SWITCH		
S4101	35-4102209-00-67	SW SLIDE 2P2T RIGHT L=9
ICs		
U4101	27-5574763-21-02	I.C. OSD DIP30SD LC74763-9012
U4102,U4103	27-5076250-21-23	I.C. AV SWITCH DIP BA7625
U4104	27-9496600-21-02	I.C. QUAD BILATERAL SWITCH LC4966
CRYSTALS		
X4101	28-5143200-06-19	CRYSTAL 14.318MHz 30ppm HC-49S
X4102	28-5177200-06-19	CRYSTAL 17.73447MHz 30ppm HC-49S
TRIGGER BOARD		
PCB ASSEMBLY	80-0907730-68-00	TRIGGER ASSEMBLY
DIODES		
D351-D353	20-3251902-00-01	DIODE ZENER BZX55 5.1V 1/2W 5%
D354-D358,D3501-D3504	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
PHONE JACKS		
M351-M357	34-4310300-00-60	PHONE JACK 1 BLACK PCB MOUNT 3.5mm
TRANSISTORS		
Q351,Q352	21-0000380-70-14	XTR SS NPN HFE20 250MHz DTC-123ESA
RESISTORS		
R358-R360	23-2121250-00-00	RES MO 120 OHM 5% 2W

Reference No.	Part No.	Description
SLIDE SWITCH		
S351	35-4102209-00-67	SW SLIDE 2P2T RIGHT L=9
REGULATORS		
U3501,U3502	27-3001201-17-14	I.C. VOLT REG 12V 1A TO-220 NJM7812
U352	27-3001201-07-85	I.C. VOLT REG 12V 0.1A TO-92 LM78L12
VIDEO-6 BOARD		
PCB ASSEMBLY	80-0907730-45-00	VIDEO-6 BOARD
CAPACITORS		
C4401,C4402,C4403	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20% 85C
JACKS		
M4401	34-4010000-01-60	RCA JACK 1 YELLOW PCB MOUNT GOLD
M4404	34-4010100-01-60	RCA JACK 1 RED PCB MOUT GOLD
M4403	34-4010200-01-60	RCA 1 WHITE PCB MOUNT GOLD
M4402	34-4110300-00-60	DIN JACK 1 BLACK PCB MOUNT
J4401	34-4510302-01-80	PHONE JACK D6.3 1 PCB MOUNT GOLD
COMPOSITE VIDEO BOARD		
PCB ASSEMBLY	80-0907730-66-00	COMPOSITE VIDEO ASSEMBLY
CAPACITORS		
C4201-C4203,C4205,C4207,C4209, C4210,C4216,C4217	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20% 85C
C4204,C4206,C4208,C4211,C4218	22-3471012-00-28	CAP ELEC GR 470uF 10V 20% 85C
RESISTORS		
J4201,J4202	44-0000027-11-00	RES SMD 0 OHM 5% 1/10W 0805
RCA JACKS		
M421,M422	34-4040020-00-60	RCA JACK 4 Y-Y/Y-Y PCB MOUNT GOLD
M423	34-4010000-00-60	RCA 1 Y PCB MOUNT GOLD RS-146G/Y
TRANSISTORS		
Q4201-Q4203,Q4207,Q4208	21-0100370-70-14	XTR SS PNP HFE 270-560 140MHz 2SA933AS
Q4204,Q4206	21-0000120-70-14	XTR SS NPN HFE 68 30MHz SPT DTC144ES
Q4205	21-0000450-70-14	XTR SS NPN 68 250MHz SPT DTA144ESA
TRANSISTORS		
U4201	27-9496600-21-02	I.C. QUAD BILATERAL SWITCH LC4966
U4202,U4203	27-5076250-21-23	I.C. AV SWITCH DIP BA7625

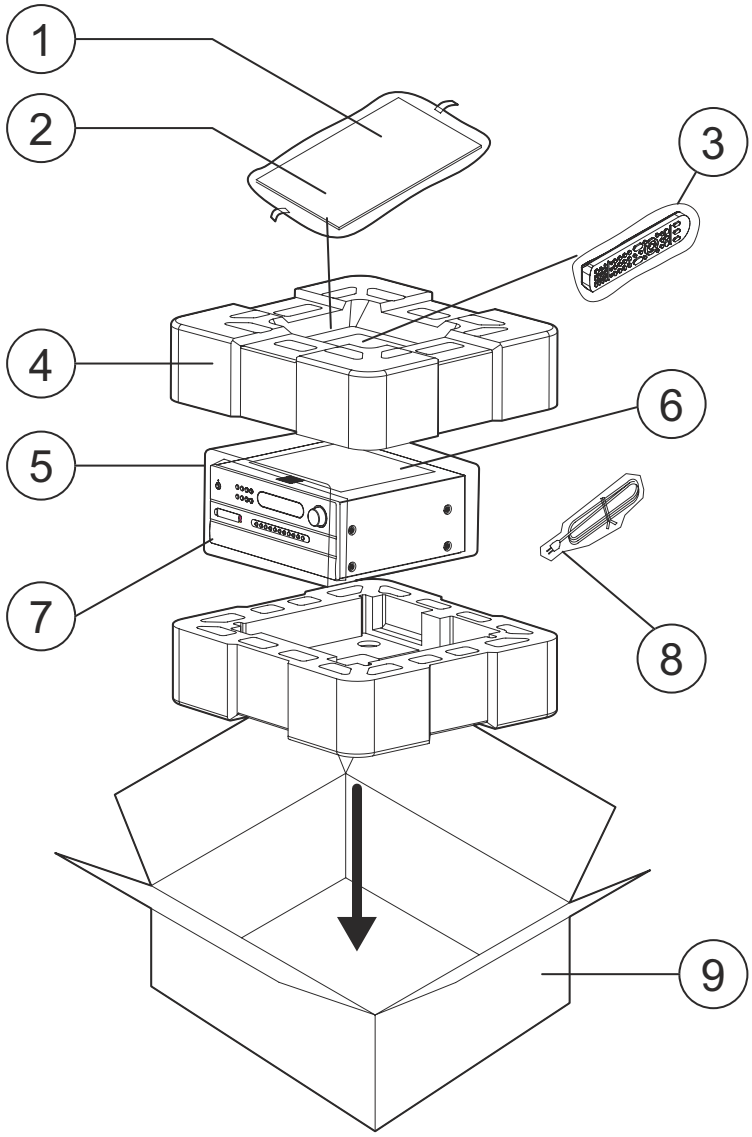
NOTE: THE COMPONENTS IDENTIFIED BY ⚠ MARK ARE CRITICAL FOR RISK OF FIRE AND ELECTRICAL SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

<*AH > : USA, CANADIAN MODEL ONLY.

<*C > : EUROPEAN MODEL ONLY.

RESISTORS: MO-METAL OXIDE, RN-CERAMIC CASE, MF-METAL FILM.

PACKING DIAGRAM & PARTS LIST



Item	Part No.	Description	Qty.
1	64-0200001-01-00	POLYBAG MANUAL	1
2	31-6407520-00-98	FM WIRE ANTENNA	1
	31-6472801-00-28	AM LOOP ANTENNA W/STAND	1
	34-0081004-00-67	300 TO 75 OHM ADAPTER	1
	37-0240300-00-81	LITHIUM BUTTON CELL CR2025	1
	61-0773004-40-99	OWNER'S MANUAL T773 GB/F/D/NL	1
	61-0773004-41-99	OWNER'S MANUAL T773 E/I/P/S	1
	83-0762000-00-04	REMOTE CONTROLLER NAD ZR-2	1
	37-0020200-00-79	BATTERY AAA 1.5V ER03X	4
	65-0752000-00-98	WARRANTY CARD	1
3	83-0752000-01-04	REMOTE CONTROLLER NAD HTR-2	1
4	63-0773001-00-01	POLYFOAM TOP / BOTTOM T773	2
5	64-0762001-00-00	POLYBAG MAIN UNIT	1
6	65-0752070-00-99	A3 WHITE PAPER	1
7	64-0762000-00-00	EPE PROTECTIVE COVER	1
8 *AH ⚠	36-2881010-07-97	POWER CORD 110V 3PINS 15A/125V UL/CSA	1
*C ⚠	36-2983110-07-97	POWER CORD CE 3 PINS 16A 250V	1
9	67-0773000-10-99	MASTER CARTON BOX T773	1

VERSION HISTORY

SERIAL NUMBER	SOFTWARE VER.	PCB ASSEMBLY VERSION
R38T77300001-R38T77300002	V.123	ALL ARE ISSUE 3
R38T77300003-R38T77300017	V1.24	ALL ARE ISSUE 3
R38T77300018-R38T77300500	V1.26	DSP BOARD ISSUE 5, ALL OTHERS ISSUE 4
R3XT77300501-R3XT77301100	V1.26	DSP BOARD ISSUE 5, ALL OTHERS ISSUE 4
R3YT77301101-R3YT77301600	V1.26	ONLY AUDIO/S-VIDEO/MULTI-CH BOARDS ISSUE 4, ALL OTHER ISSUE 5
R3ZT77301601-R3ZT77301850	V1.26	ONLY AUDIO/S-VIDEO/MULTI-CH BOARDS ISSUE 4, ALL OTHER ISSUE 5
R3ZT77301851-R3ZT77301860	V1.26	ONLY AUDIO/S-VIDEO/MULTI-CH BOARDS ISSUE 4, ALL OTHER ISSUE 5
R3ZT77301861-R3ZT77301960	V1.26	ONLY AUDIO/S-VIDEO/MULTI-CH BOARDS ISSUE 5, ALL OTHER ISSUE 6

REMARK: PCB Number 55-0773XXX-XX-**00** = ISSUE 3 OR 4,
PCB Number 55-0773XXX-XX-**01** = ISSUE 5,
PCB Number 55-0773XXX-XX-**02** = ISSUE 6.

SERVICE MANUAL

T 773

A/V Receiver

NAD ELECTRONICS LTD
LONDON